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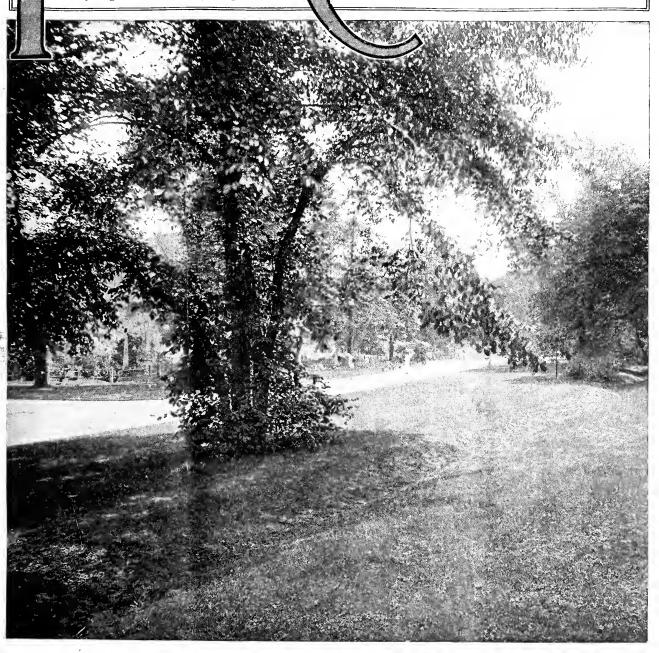
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MARCH, 1911



VIEW IN "THE RAVINE," ALLEGHENY CEMETERY, PITTSBURG; SEE PAGE 495.

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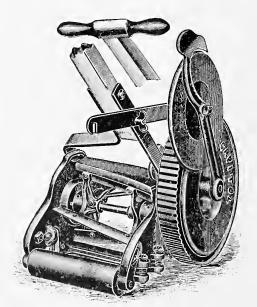
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Do you think these statements are trite, needless repetition of commonly accepted facts? Do you say that everybody knows it, that nobody needs to be told? Then why, pray you, are your trees neglected? If everybody knows that trees are of greatest value and are the very first and foremost asset of a park or cemetery, why are they the last things to receive attention? Why build costly drives and stately monuments, why create all this artificial beauty around the wrecks of trees? A veritable broadside of facts are available to prove that the trees of our parks and cemeteries are falling into decay and early death through neglect and abuse.

You would not take a hundred dollars apiece for your trees—nay a thousand apiece for the fine ones! Then why hesitate to spend ten dollars apiece to put them in perfect physical condition? (It might cost more if they are in reasonably good condition.) Consider it from the standpoint of beauty alone, would it not pay? Consider it from the standpoint of beauty alone, would it not pay? Consider it as a hard, cold business proposition, would it not pay? Weigh this thought in the balance—which is more valuable, a thousand dollars or a hundred perfect trees?

Walter H. Wheeler, Superintendent

William F Landes, Secretary

THE CROWN HILL CEMETERY

Indianapolis, Indiana, February 16, 1911

The Davey Tree Expert Co. Kent. Ohio.

Gentlemen.—Your methods are certainly practical and based on correct principles and the execution of the work was thorough and conscientions. While it is yet to soon to judge of the actual results and value of the work yet we have every confidence that they will measure up to expectations and show that the money spent was a wise and profitable investment. Some of the big forest trees if lost could not be replaced at any price.

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Yours very truly. (Signed) Walter H. Wheeler, Superintendent.



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The beauty which is created and maintained by that splendid body of practical men who superintend our parks and cometeries is sufficient proof of their skill. The keeping of the grounds and the transaction

keeping of the grounds and the transaction of regular business is great enough load for them to carry—sometimes too great. Even if they were especially trained tree surgeons (which they are not), they have no time to devote to the trees. If anything is done it is rough work by the ordinary unskilled labor which happens to be available. The correct treatment of trees requires both a scientific and practical knowledge of tree-surgery; it requires long and careful training and the skill which comes from it; it requires the agility of youth for climbing and the almost reckless abandon of men to the dangers of working high in the air; it requires special tools and equipment. You cannot expect a plumber to be a painter, a carpenter to be a florist, or a physician to be a dentist. It is nothing against the physician that he is not a dentist, nor is it to the discredit of a florist or gardener that

dentist, nor is it to the discredit of a florist or gardener that he is not tree-surgeon.

The Davey Tree Experts are Tree-Surgeons and they are nothing else. They work at nothing else from one year's end to another. They are expert because John Davey taught them the principles and practices of tree-surgery and because they work at it constantly. The responsible men in the Davey service are trained in the Davey Institute of Tree-Surgery. There is no school like it and tree-surgery cannot be learned elsewhere. They save trees—actually save them and bring them back to proper physical condition. Wounded and crippled trees need the Davey experts. The cost of the Davey service is not forbidding. It is the quality service. An inspection of the trees under your charge is desirable. Let a Davey Tree-Surgeon make a careful examination of these trees and tell you fully and frankly what conditions he may find and what treatment may be necessary. When a representative is in your locality an inspection can be arranged without cost to you. Write at once.

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Work of the Davey Tree Experts in Crown Hill Cemetery, Indianapolis, Ind.

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And have not already placed your order, or have an additional order to place, it must be done at once. In fact, at this time it is very important that you place the order where you can depend upon getting the best service. For such orders let us call your attention to the service we offer.

We have a nursery of 225 acres devoted to the growing of Hardy Ornamental Nursery Stock that will please the most particular customer. Every plant in our nursery is properly grown and fully up to grade. We have a fine assortment of varieties and large quantities of all sorts. Furthermore, we are in a position to handle and ship all orders with a promptness that will please.

Send us your orders and you can depend upon getting quality and service that is surpassed by none. And from the large assortment and quantities we have, you are offered the best opportunity of having the order filled in full. Have you our catalogue? We sent them out about seven weeks ago. If you didn't get a copy, tell us and we will send it by return mail.

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PARK AND CEMETERY

LANDSCAPE GARDENING_ A N D

Vol. XXI

Chicago, March, 1911

No. 1

Play Ground Parks and Buildings

It is gratifying to note the rapid development of playground parks and recreation buildings, and it is clear that, as is said, they quite evidently fill a long-felt want. The audience buildings are becoming very popular, and are used not only for public lectures and such entertainments, but in many places they are in demand for private parties, young folks' meetings and for other such uses. In Chicago arrangements can be made for special uses, subject, of course, to prior demands, and this will tend to develop the advantages of such a gathering center, and inevitably promote a higher life in neighborhoods not hitherto accustomed to such opportunities. The larger cities can very well afford to be liberal in their expenditures for such public benefits.

"Spray Early and Often"

Not the least of the wise suggestions for the coming spring is that of considering the question of spraying the trees and shrubs, as a check on the horde of noxious insects which will be here, there and practically everywhere, before one scarcely realizes it. The numerous catalogues, and instructions given therein on this important subject, should not be passed over lightly by any one indulging in a garden or possessing home grounds for the difference between a sprayed area and one unsprayed is so great, that if not an enthusiast on the subject, this year, if one has anything left by fall, spraying will certainly be tried next. All the state agricultural stations issue, annually, a pamphlet on the subject of spraying, and as the information given should be necessarily reliable, we advise all those interested to secure one before spraying operations begin in earnest.

W W W Improvement of the Country Cemetery

The improvement and care of the small country cemetery has been one of the most difficult problems confronting the enthusiastic improvement worker. How to start improvement and then how to carry it on, have been discouraging altogether to most improvers' minds. And yet quite frequently we come across instances where success has attended well defined efforts; and we believe that still more success would result, were it possible to enlist the right sort of enthusiasm in the work. Quite recently our attention was drawn to a case in Kansas where the village cemetery, very old in years, had been allowed to degenerate into a perfect wilderness. Some seven years ago, these shocking conditions appealed to certain citizens, who recognizing the fact that "it is never" too late to mend," reorganized, as it were, the cemetery association and started to clean up and create a presentable burial ground. A steady improvement has taken place, year by year; a gardener has been employed to take care of the trees and shrubs in the season, and notwithstanding that the little eight-acre plot is encumbered by a legal provisio which prevents the full development of the tract, there is still spirit enough left in the citizens now taking care of it, to make an effort to lift the embargo and so continue the good work begun years ago. It is evident from the above that the personal equation has much to do with the improvement of the country

cemetery, and surely there must be some in every community who only need a stimulating influence to enlist their services in such a beneficial work as the beautifying of "God's Acre."

W W

Some Vital Legislative Questions Among the important matters of general interest now before the American people, there are three which will require prompt and persistent attention in order that the good which they mean may not be neutralized. It is this point of view which must be our excuse for inviting our readers' consideration through these columns. They are the proposed increase in the second-class postal rate for newspapers, magazines, and such periodicals; the Parcels Post and the federal and state legislation necessary for the preservation of Niagara Falls. In relation to the increase in the second-class postal rate there appears to be in Washington, from President Taft down, a determined intention to secure an increase, and this in spite of the evidence that no actual loss is entailed upon the Post Office Department in the transportation of this class of mail, while on the contrary, it is known to increase, to a very large extent, the first class receipts. But there has been proven against the Post Office Department a deplorable lack of business system, due, very probably, to the political caldron constantly simmering therein. Congress has made certain futile efforts to inaugurate a business reform, but up to date of little avail, and it would certainly appear that before any change in rates is put into effect, an overhauling of the department should be made, when reliable facts and figures should be available upon which to base equitable figures. While arguments are being disseminated to the effect that any increase in the postage rate will only reduce the profits of the publishers, the American people have surely had experience enough to show them that in the final analysis they always foot the bills. In this case it behooves every citizen to get into communication with his representatives in Congress, and to insist upon his voting for reform of business methods in the Post Office Department before the question of increase in rates is taken up. The next issue is the Parcels Post, which is such a boon in other countries, but which is denied to our own citizens because of the possible injury to certain interests, the most emphasized being the express companies and the country store-keeper. If the axiom: "The greatest good to the greatest number," has any value at all, the interests so carefully considered by our governing agencies have no standing; and considering that the country merchant is also in the great minority, why should he be considered as against the good of the majority? It has not, however, been very clearly shown that he will be injured at all; it is quite possible that his zeal in opposition is a mistaken one. This is then another profitable direction in which our readers may profitably exercise themselves in an appeal to their congressmen. As to the preservation of Niagara Falls, this is a matter of world-wide interest, and the American Civic Association, which has been jealously guarding this natural wonder, has recently issued a circular urging immediate help. The Burton bill, which expires by limitation on June 29, 1911, should be extended to the limit of the "Waterways Treaty" with Canada, and everybody should urge upon senators and congressmen in Washington the immediate passage of Senate Joint Resolution 143 for the preservation of Niagara Falls.



CONTINUED PROGRESS OF CHICAGO PLAY PARKS

The annual report for the forty-first year of the corporate life of the South Park Commissioners of Chicago, just issued, shows a steady progress in the development of the enlarged park system and a gratifying increase in the patronage of the parks.

The increase has been pronounced in the older and larger recreation areas around which there has been a rapid growth in population, as well as in the new parks, most of which have been in operation five years. Half a decade may be regarded as a sufficient period of time to test the practical value of the service rendered by the new parks. Statistics gathered from year to year permit neither doubt of the civic value nor of the popularity of the field houses, gymnasia, athletic fields, swimming pools and playgrounds. Each year's experience has made it possible to improve the service and increase the efficiency of the new parks as agents for providing healthful amusement, social recreation and certain education opportunities for the people living near them.

During the year covered in this report a notable improvement was made in the employment of field house directors to provide trained and intelligent supervision and guidance of the social activities in the field houses. From the first athletic instructors have been employed. They have supervised the athletic fields and gymnasia, have given instructions to participants in sports and games, and, through field meets, tournaments and league contests in the various games, have brought the physical phase of the park work to a high degree of efficiency. But social activites before the last year had been left largely unguided. The assembly rooms and club rooms in some cases were not used to their full capacity.

For field house director in each of the ten new parks a man of refinement, education, initiative and social training has been chosen. A marked improvement has been brought about by the activity and intelligence of the new employes, especially in parks in congested districts, where the need of direction in social activities was most pronounced.

As an example, good results have been noticed in a park surrounded by residents who were slow to appreciate the opportunities afforded, except the bathing facilities. Study of the customs and mode of life of these people enabled the director to promote various movements which stimulated the use of all park facilities. Once comprehended, the knowledge of the various advantages afforded spread rapidly. The park is now filling its place as a neighborhood center and supplying to the community wholesome physical and socal recreation and an educational stimulus.

In another instance, the assembly hall and club rooms were not being used sufficiently. After consulting with clergymen, school teachers and leading citizens of the neighborhood, the field house director established "A Pleasant Sunday Afternoon," at which musical entertainment furnished by amateurs and an address by a volunteer of merit, were offered. This supplied a needed recreation in the neighborhood, where questionable amusements were the only available attractions on the afternoon of the weekly rest day. It met with immediate favor. It was the beginning of social movements which have brought the use of assembly hall and club rooms in this park up to within thirty per cent of the possibilities.

Five years' experience has demonstrated that the field house and gymnasium facilities provided in the new parks, so far from being too elaborate as was first predicted by some adverse critics of the new venture, in most cases are inadequate to meet demands. Plans adopted for the buildings in the new park bounded by Forty-fifth street and Forty-sixth place, Princeton avenue and the Pennsylvania Railroad, will provide a recreation plant larger than in any other park. Not only the size will be increased, but the quality of the construction will be improved. This park embraces ten acres in the heart of a thickly populated district just east of the stock yards. The building for the men's and women's gymnasia and shower baths, and that for the club rooms, reading room, lunch room and assembly hall, will surround an inner court 110

by 116 feet in size. On three sides of this court will be a pergola covering a broad walk. The center of the court will be a garden. This attractive feature, removed from the portions of the park devoted to youthful activities, is provided for elderly persons, who seek and require peaceful surroundings that they may rest.

The building for the showers and gymnasia will bound the north, east and west sides of the court, and the building for the assembly hall, club rooms, reading room and lunch room will be erected on the south side. These buildings will have solid concrete walls interlined with tile, and tile roofs. The swimming pool will be south of the main group of buildings. There will be a separate building for dressing booths.

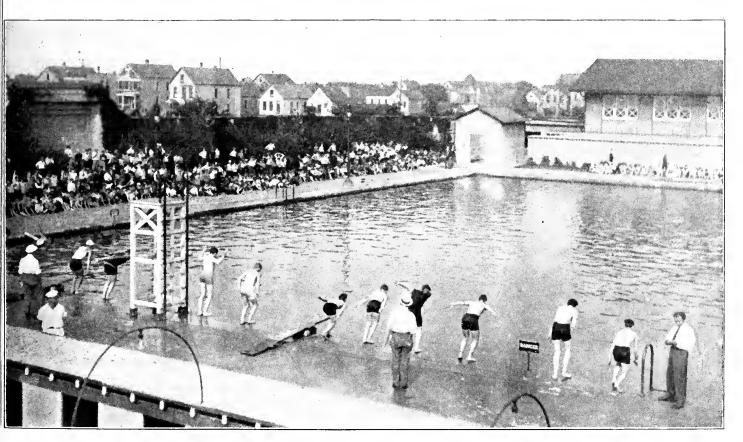
Each gymnasium will be fifty by eighty feet in ground measure and twenty feet to the rafters, which is larger than in any other park. The walls will be of terra cotta and the floors of maple. There will be a balcony for spectators at games, and a full equipment of apparatus. Each locker room will be forty-three by fifty-six feet in size. The shower rooms will be larger than elsewhere, and more substantially finished. For women there will be twenty-eight private showers, each with a dressing room with locked door attached. For the men there will be fifteen private and twenty-three open showers. Both shower rooms will be finished in marble and terra cotta.

The main building, in which the assembly hall and its accompanying features will be located, will be eighty by one hundred feet in ground measure and two stories high. On the first floor will be a large entrance hall, twenty-eight by sixty feet in size, from which ornamental iron stairways will lead to the assembly hall and club rooms above. The entrance hall will be finished in marble. On one side will be the lunch room and kitchen, and on the other side the reading room, where a branch of the Chicago Public Library will be established and maintained.

The assembly hall will be fifty by eighty feet in size with a stage twelve



FORD IN BRIDLE PATH, JACKSON PARK, SOUTH PARK SYSTEM OF CHICAGO.



INTER-PARK AQUATIC TOURNAMENT, SHERMAN PARK, CHICAGO.

by fifty feet. This is the largest assembly hall in the park system. The two club rooms will be each nineteen feet, eight inches, by twenty feet in size.

The swimming pool, varying in depth from one foot to eight feet, will be 60 by 150 feet in surface area, constructed of reinforced concrete and lined with enamel tile. The building for dressing booths will be roofed and will provide two hundred booths.

Athletic fields for both sexes, a playground for children and a big field for baseball and football games and skating will be provided. In each athletic field there will be a concrete grand stand for spectators.

Urgent demand for more ample bathing facilities at Mark White Square, bounded by Twenty-ninth Thirtieth, Halsted and Poplar streets, has been met by the construction of two additions to the recreation building to be used as shower rooms. They have marble floors, walls and both partitions of marble and sanitary glass, and the best of plumbing fixtures. There are sixteen open and eight private showers for men and ten open and fourteen private showers for women. A total of 102,488 baths were given in the shower rooms of this park during the year, although during October, November and December the showers were closed on account of reconstruction work.

The park system was increased during the year by the selection of a tract of a little more than twenty acres between Ninetieth and Ninetyfirst streets, and St. Lawrence and South Park avenues. It lies in the heart of a district destined to be a great industrial community. The land was acquired when it could be bought cheaply to meet future needs. It adjoins Burnside.

A new administration which provides adequate office room for carrying on the business of the South Park Commissioners, was one of the important features of the year's work. Since 1902 the total area of the south parks and boulevards has increased from 1,535.14 to 2,494.59 acres, or more than 62.5 per The number of parks and squares has been increased from six to twenty-four, or 300 per cent; and of the six parks controlled in 1902, the area of Grant park has been increased from 74.88 to 205.14 acres; and of McKinley park from 34.33 to 74.88 acres. The mileage of boulevards under the jurisdiction of the commissioners has been increased from 17.28 to 32.98 miles, or 90.8 per

cent. The increase in administrative work is far greater than the increase in acreage would indicate, owing to the extensive development of the new ideas of park efficiency.

After securing expert advice and obtaining estimates on the cost of reconstructing the old building, the South Park Commissioners decided the economical course was to build a new headquarters of substantial and durable construction, and of sufficient size to take care of imperatively needed present requirements and of future development. Accordingly plans were prepared, specifications written and a contract was let August 6, 1909. The building, now complete, is of concrete, one story high and of rough exterior finish.

Statistics covering the facilities for physical and social recreation, published in this report, indicate the extent of the administrative work in the enlarged park system and the part which the parks have come to play in the life of the people. The place they fill as playgrounds, for all sports in all seasons, is shown by the fact that there were maintained during the year two golf courses; 198 tennis courts, of which 148 were equipped with nets; thirty-two baseball diamonds; twenty-five football fields; eleven swimming pools and one lake bathing beach; sixteen wading pools; twenty indoor gymnasia; twenty-two outdoor gymnasia and athletic fields; twelve children's playgrounds, and thirteen sand courts. For winter sports there were nineteen skating ponds covering eighty-six acres; three curling rinks; one hockey rink and one ice-speeding course. Two roque courts, an archery range and a baitcasting pool were maintained in Washington park. The yacht harbor in Jackson Park was occupied to its capacity by pleasure boats.

On the two golf courses 336,000 games were played. In one day 1,400 persons played over the eighteen hole course.

In the new parks, where it has been possible to keep count of patronage, there were 1,943,228 users of the outdoor gymnasia and 302,222 of the indoor gymnasia; 1,212,421 baths were given in the shower rooms and 758,149 in the swimming pools and bathing beach.

In the ten assembly halls in the new parks which were used for lectures, dances, dramatic performances and similar entertainments, 246,660 persons gathered during the year. The twenty-two club rooms, used for social meetings, acscommodated 41,701

persons. The ten reading rooms accommodated 637,683 persons.

All these specified uses of the park facilities were in addition to those who rode and drove on the boulevards and drives, the crowds which gathered as spectators of games, and the great number of persons who went to the park for a day in the open air, to refresh themselves on the lawns, enjoy the beauties of the landscape and floral displays, row on the lagoons, or ride in the launches.

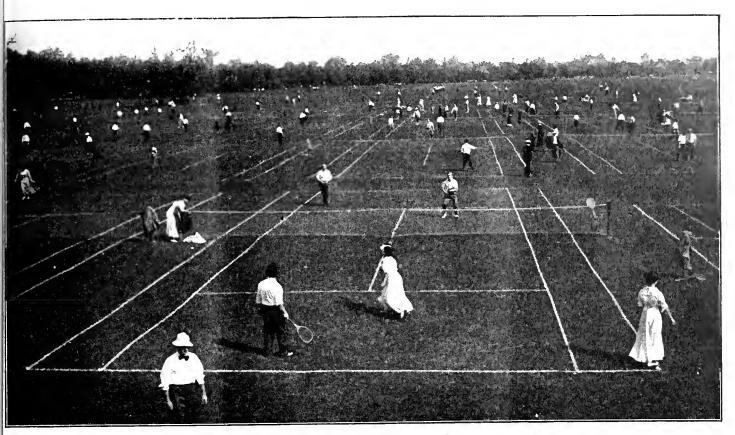
Management of the park refectory service, which is entirely under the direction of the South Park Commissioners, and the operation of the ice cream factory, and of laundries in the new parks, which wash the bathing suits and towels supplied free to all applicants, form important features of the administrative work. The boat service also is conducted by the South Park Commissioners. There are no concessions in the south parks.

In the laundries in the new parks 2,879,030 pieces were laundred at a considerable saving over the cost of having the work done in commercial laundries. The nursery conducted in Marquette park, where all of the shrubs and many of the trees used in the new planting were propagated, showed a saving for the year of \$19,-402.10 over the cost of obtaining the stock from commercial nurseries. The refectories and lunch counters were conducted to serve the public at the lowest possible prices without seeking a profit. At all of the lunch counters the certified milk prepared by the Milk Commission of Chicago was kept for sale at two cents an halfpint bottle. There were 221,309 bottles

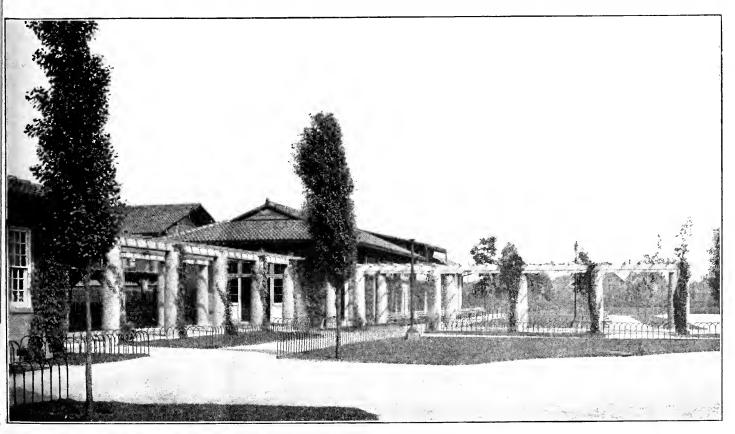
Reclamation of submerged land in Grand park was completed so far as is provided for in the plans which have been adopted by the South Park Commissioners.

Important litigation involving this park was begun. A. Montgomery Ward obtained a decision from the Illinois Supreme Court holding that on account of the conditions of the original dedication of the lake front by the Illinois and Michigan canal trustees no building may be erected in Grant park.

Considerable rebuilding and repairing of boulevard roadways was made necessary, as in the past, by the wear of automobile traffic. Progress in the development of an automobile-proof pavement has been more satisfactory. The latest improvement is the use of asphaltic concrete two inches thick as a surface. Asphaltic concrete consists



TENNIS PLAYERS ON THE MEADOW IN WASHINGTON PARK, CHICAGO.



SHERMAN PARK FIELD-HOUSE GROUP, SOUTH PARK SYSTEM OF CHICAGO.

of crushed limestone and torpedo gravel, mixed and heated in a revolving cylinder and, while hot, combined with liquid asphalt. When thoroughly mixed it is spread over the driveway, rolled and surfaced with a thin mopping of asphalt, over which is spread fine crushed granite. Only enough asphalt is used to cement the particles of stone together. The result is a pavement having the appearance of macadam, yet one that so far has been proof against disintegration by the friction and suction of automobile tires.

Most of the repairing and repairing have been done by the South Park Commissioners at a considerably less cost than under contract.

Extensive improvements in the plantation in Washington park were made, 40,863 trees and shrubs being set out, adding two and thirteen-hundredths acres to the area of plantation in this park. This was a step taken in the interest of the future.

New trees were planted which will take the place of trees now reaching old age and destined in a few years to die out. The new shrubbery adds greatly to the beauty of the landscape in various portions of the park. Steps were authorized at the same time for work to preserve old trees of long lived varieties, which are good for many years, if properly cared for. Some of these veterans are showing the effects of lack of food, the soil of Washington park being deficient in nourishment. Composted soil will be deposited near such trees, where it can be reached easily by the roots and supply the needed nourishment. A similar work of preservation will be carried on in Jackson park and along the older boulevards.

The total expenditures for park operations for the year amounted to \$1,036,920.

The repair shops and store rooms were remodeled and re-equipped. The area occupied by these buildings is 184 by 528 feet, just west of Cottage Grove avenue extending south from Fifty-eighth street. The plant consists of three lines of brick buildings, one story high and forty feet wide, with two thirty-foot driveways separating them. The roofs of the work shops and part of the store rooms are of the saw-tooth patern, giving excellent light from the north. Elsewhere the regular hip roof is used, covered with slate. The floor area of all the buildings totals 57,330 square feet, equalling one and three-tenths acres. They are used for the following purposes: For store rooms for all small supplies, and for lumber, coal, steamrollers, hose, plows, carts, stoves and other materials and implements; a machine shop, a blacksmith shop, a carpenter shop, a paint shop with varnish room, plumber's and pipe-fitter's shops, electrician's shop, cement working room, boat storage, iron room, ice cream factory, and garage.

TAR MACADAM ROADS IN GREAT BRITAIN

Consul Rufus Fleming at Edinburgh, makes a recent report on the experience with various forms of tar macadam road construction and maintenance.

The Edinburgh county road surveyor gives the results of his observations in England and his experience in Scotland with respect to the use of tar and pitch as binding materials for stones used in making and repairing roads. The four methods of applying tar considered are: (1) Tar spraying, (2) tar macadam, (3) pitch grouting, (4) tar matrix.

The above methods and cost per superficial yard over ordinary macadam, detailed by the county road surveyor, are here summarized:

Tar Spraying.—It is essential that all dust and caked mud be removed from the road before the liquid is applied. After tarring, a slight sprinkling of whinstone screenings is spread over the surface. Hand tar spraying is considered superior to machines, although it costs slightly more and takes longer. In this process tar is not so much a binder as a waterproof protection to the road surface. It is soon worn away, however, and when broken up the road is thrown into an uneven and dirty condition. It is now admitted that tar spraying lasts only for one season. The life of a road subjected to much fast motor-car traffic is increased by 15 to 20 per cent when tar sprayed. One of the main thoroughfares in Edinburgh County costs on an average \$1,460 per mile per annum to maintain as at present. If tar sprayed its whole width the cost would be \$1,800 per mile, after allowing for the lncreased life of the road, as above indicated.

Tar spraying is most sultable for country roads where expenditure is limited, and

although tarring the entire surface would be preferable, a width of 10 to 12 feet in the center would accommodate motors and protect the metal bed, allowing at least double the length being sprayed, and leaving the sides with a better foothold for horses during frost.

Tar Macadam.—This consists of thoroughly mixing the stone with tar and pitch previous to its being laid on the highway. All stones should be dry, which necessitates preparation of the material under a covered structure. Tarring may be done by hand or machinery. It is usual to allow the material to lie in heaps one to three weeks to mature before applying. The coatings are applied in three layers of 2½ and 1½ inches and ½ inch stone, rolled separately, and finished with a thin layer of fine dry screenings. Tar macadam roads are easily cleaned, and the cost of maintenance on an average of years is less than ordinary macadam. It is slippery during frost and unsafe on gradients steeper than 1 to 20. Under very heavy traffic it loses its bituminous surface in two or three years, and the top layer becomes separated from that below. This system involves a comparatively heavy initial expenditure, and its general adoption on county roads would appear to be impracticable.

Pitch Grouting.—This consists of application to a scarified road, rolled smooth, of a 3 to 4 inch coat of whinstone metal, consolidated in a dry state, after which boiling pitch and tar is poured into the joints, sprinkled with small whinstone or limestone gravel, and rolled until thoroughly hard. The composition is made up as follows: Pitch (best coal tar), 1,100 pounds; refined tar, heavy bodied, 800 pounds; creosote oil, 100 pounds; total, 2,000 pounds. The mixture is applied to the roads at aboiling point with spray cans, whinstone chips are immediate applied, and rolling at once undertaken. This composition is of a quick-setting nature, but retains considerable viscosity. The surface must be thoroughly dry before it is applied. The surface is smooth, but not slippery. The traffic is carried on the metal and not on the tar, as is the case with dry macadam, tar painting, or tar matrix. This is regarded as

Tar Matrix,-There are three methods of applying tar matrix. It is usual to slightly scarify the existing road surface. The first is to spread a layer of small gravel, previously tarred, to a depth of 1 inch to 11/2 inches, on which is laid ordinary road metal. This is rolled until the matrix is forced to the surface. In the second the road metal is spread first and well rolled in the dry state before the matrix, composed of tarred materials up to 1 inch in size and to the foregoing depth, is applied. This is rolled until the inter-stices are filled with the matrix and a smooth surface has been obtained. A thin finishing coat of finer tarred materials is usually applied, sprinkled with dry sand or chippings, and rolled until thoroughly hard, The third or Gladwell system is a combination of the first two, having a matrix both above and below the metal.

Rocmac.—Roads made on the rocmac system are claimed to be dustless, waterproof, economical, durable, and nonslippery. The solution is a chemical composition, made under pressure, the foundation of which is silicate of soda and sugar. The solution is mixed with a high-class ¼-inch limestone and gravel free from impurities. This is laid about 1 inch to 1½ inchesdeep on the road surface, which has been slightly scarified. On this is spread the ordinary macadam metal, about 3 inchesthick, and thoroughly rolled until the matrix entirely fills the interstices and comesto the surface. Owing to the simple preparation of the matrix and small plant required, the work can be undertaken by ordinary workmen, but experiments have proved it expensive compared with pitch grouting.

In Scotland, as well as England, county road boards that have experimented with tar macadam in constructing new roads and maintenance of old have practically abandoned it, the cost being prohibitive. Tar spraying of 10 to 12 feet in the center is generally regarded as the limit of economical treatment of macadam roads in outlying districts, and this has been restricted to main thoroughfares and of village roads. For suburban roads it is likely that the use of pitch grouting will increase.



WINNING MODEL FOR CHICAGO GOETHE MONUMENT. Hermann Hahn, Munich, Sc.

SELECTING GOETHE MONUMENT for CHICAGO PARK

The competition for the Goethe memorial, to be erected in Chicago, was one of the most carefully considered and well planned of any monumental project of recent years, and the exhibition of all of the models that were submitted for this memorial put on view at the Art Institute of Chicago, January 17, shows the wisdom of the methods. Every one of the models would make a worthy memorial for any city in the country, and it is the intention of the Goethe Monument Association to secure the erection of as many of them as possible in other cities, the funds to be raised by local admirers of the poet. There is already a sentiment started in Baltimore for the erection in that city of the model of Hans Schuler, the Baltimore sculptor, one of the two Americans who took part in the competition

By the careful planning of those in charge, this monument is the result of a broadly conceived international movement. Although the funds for the monument were raised in Chicago, it was felt that a commemorative piece of sculpture worthy of representing the German poet could be procured only by invoking the aid of his compatriots, and the committee selected to take charge of the competition, as well as the sculptors invited to compete, include some of the leading representatives of the arts in the Fatherland. At the outset, it was determined to avoid the errors into which former commissions had fallen, to accept no replicas of other Goethe monuments or indifferent portrait statues, and secondly, not to have a por-

trait statue at all. This latter innovation, truly commendable, was welcomed by the sculptors as releasing them from the trammels of costume and conventionality and permitting them to give free flight to their imagination and their enthusiasm. For the monument is to represent, not the poet himself, in his temporary human form, but the eternal characteristics of his genius, an ideal symbolizing of his life works in all their influence and importance; in other words, the "Spirit of Goethe."

To secure these results, the chairman of the jury, Mr. Harry Rubens, of Chicago, visited Germany, consulted with the most eminent authorities, directors and artists, and inspected many of the most notable commemorative monuments both in north and south Germany. The following eminent sculptors, as a result of these deliberations, were invited to compete, each one to receive the sum of \$750, and the winner of the competition to execute the monument: Professor Cipri Adolph Bermann, of Munich; Professor Hermann Hahn, of Munich; Anton Hanak, of Vienna; Professor Hugo Lederer, of Berlin; Professor Hubert Netzer, of Munich; Othmar Schimkowitz, of Vienna; Professor Georg B. Wrba, of Dresden; Albert Jaegers, Suffern, N. Y., and Hans Schuler, Baltimore, Md.

The jury to decide this competition included the following artists and laymen: Ferdinand von Miller, Munich, sculptor, director of the Royal Academy of Munich; Louis



MODEL FOR CHICAGO GOETHE MONUMENT. Othmar Schimkowitz, Vienna, Sc.



MODEL FOR CHICAGO GOETHE MONUMENT. Hubert Netzer, Munich, Sc.

Tuaillon, Berlin, sculptor; Karl Bitter, New York, sculptor; Prof. Frederick A. Ohmann, Vienna, architect; Harry Rubens, Chicago, attorney.

The jury was in session for two days, and as has already been told in these pages, selected the design of Prof. Hermann Hahn, of Munich. The successful design, which is illustrated herewith, presents a figure 15 feet high, of a lightly draped young man, who, with one foot resting on a block of marble, is holding an eagle on his knee. Standing some distance behind the pedestal is a bust of the poet. A quotation from the poet is inscribed on the pedestal: "He took to himself an eagle's wings."

The model of Hans Schuler is one of the most artistic and pleasing of the group. The central feature is a bust of the poet on a simple pedestal. A curved wall behind bears a large allegorical frieze symbolizing the poet's life and works, and allegorical features at either end suggest the character and spirit of his poems.

The design of Othmar Schimkowitz is conceived on somewhat the same general lines. The central figure is a bust similar to Mr. Schuler's, but the wall is closer to the bust, and almost encircles it, the allegorical frieze running around the entire wall. Only a small opening about the size of a door is left at the front. On either side of the door, forming door posts, are allegorical reliefs, seated figures almost suggestive of Sphinxes, with great conventionalized wings, rising up like posts at the sides of the gateway. With the exception of this rather ponderous decoration at the entrance, this design is one of great beauty and imaginative feeling.

Around the inside of the circular wall of Mr. Schim-kowitz's design are low relief symbolic groups. At either side of the entrance are intertwined clusters of vines growing up the wall and hanging over the top. Other than these the wall bears no decorations on the outside.

Georg B. Wrba's design is one of that finely architectural type of monumental relief that the Germans know so well how to construct. It bears on subsidiary pedestals two symbolic figures at either end of the main tablet, and a relief medallion of the poet's head is set into the center of the tablet. It is an admirable combination of architecture and sculpture.

Anton Hanak's design is a typical example of the severely conventionalized Viennese school, and is a somewhat novel conception to American eyes. A simple allegorical figure rises from a heavily conventionalized and decorated shaft. It is an interesting example, and might tend to stimulate something of originality in the American sculpture if it could be erected in one of our public places.

The motif of Mr. Hanak's design is to represent the Genius of Nature rising from a flower, the conventionalized form of which is represented in the pedestal.



MODEL FOR CHICAGO GOETHE MONUMENT. Hans Schuler, Baltimore, Sc.

The model of Albert Jaegers embodies a central symbolic group placed in the center of a fountain basin. The group typifies "Goethe Prometheus," and portrays a nude, seated, male figure holding aloft a lamp or funeral urn in one hand and with the other releasing spirit figures from an enveloping mantle.

Hubert Netzer of Munich conceives his monument as a circular open temple supported by ten fluted Corinthian columns in groups of two. In the center is a votive urn placed on a shrine. Two low flights of steps lead up to the temple and the structure is enclosed with an open stone wall broken at intervals by nine small pedestals bearing standing symbolic figures.

C. A. Berman of Munich conceives a great open plaza, surrounded by large and closely growing formal trees. A low enclosing wall borders the oblong outline of the plaza. It is open at the front and on either side of the entrance are reclining symbolic figures. Closing the wall at the rear is another cross wall, in the center of which rises the chief architectural feature of the monument, a truncated obelisk bearing an upright, winged, symbolic figure rising with outstretched arms on a globe.

Hugo Lederer's model takes the form of a massive circular temple with heavy projecting pilasters at intervals all around, and with the heavy wall broken with four narrow doors. Inside are four seated symbolic groups placed against the walls and looking toward a central shrine or altar.

The models are to be exhibited in other cities when they leave Chicago, and it is hoped that arrangements will be made for their erection in other cities.



MODEL FOR CHICAGO GOETHE MEMORIAL. Hugo Lederer, Sc.

CLAIMS OF USE AND BEAUTY IN PARK SERVICE

One of the problems which is confronting park officials everywhere in America is how best to plan and manage them for the greatest public good. It is in a way the interminable struggle between beauty and utility. It may be said in a figurative sort of way that many parks are too beautiful to be useful, while others are too useful to be beautiful. It is exceedingly difficult to draw the line between the beautiful and useful in park construction and management largely because of the great diversity in the character and tastes of visitors. One person goes to a park to admire the beautiful in nature, fine specimens of trees, rock work, groupings of shrubs, beds and borders of flowers-in short, the better results of landscape art and science, while another goes to find a comfortable seat, in the shade to read the sporting page of a Sunday monstrosity—a "newspaper," so-called, or finds it a convenient place to stroll or "walk off" the effect of a big dinner or "night with the boys." Some children go into a park filled with the spirit of destructiveness, and devote their time and energies to doing all the damage they can and escape the policeman, while other children enjoy a romp on the walk or lying down in a quiet spot and reading books.

The location of a park has, of course, much to do with its character. Boston Common is essentially different from Bronx Park and yet in most parks there is a golden mean between the extremes of artistic beauty and practical utility. A park like Central Park, in New York, which is in the direct line of travel of thousands of people, cannot be developed in the same way as a park miles away from the centers of population. In some places it seems absolutely necessary to sacrifice beautiful lawns, flower beds, shrubs, etc., for numerous walks, play grounds, etc. On the other hand it is difficult to get visitors enough to a remote park, no matter how beautiful and attractive from an artistic standpoint it may be. Is it not the experience of park officials that few people visit parks to see nature-no matter how elaborately adorned? Broad landscape views and artistic groupings of trees, shrubs and flowers attract visitors as a whole, but the individual elements, the trees and plants, are as a rule neither noticed nor appreciated. The indifference of the public to the minor details of

landscape art is very discouraging to those who are working so hard and making so many sacrifices to develop a finer aesthetic taste along the lines of natural beauty among our citizens.

There is a growing disposition to make a sharper distinction between parks-that is to say, broad areas of land laid out by competent landscape architects, and developed by trained florists and foresters, and so-called playgrounds, out-of-door gymnasiums, wading and swimming pools, baseball fields and picnic grounds. This is evidenced by the growing rivalry between the park and educational departments of many of our big cities as to which shall get the appropriation and control the expenditures for out-door recreation grounds, outside the limits of the big parks. It is perhaps well that it should be so for there is a wide difference between the management of a broad expanse of land covered with trees, shrubs, flowers and grass, and a play-ground.

There can be no question about the ultimate good in a large way of every sort of out-door recreation and any comparison of the relative values of parks, and their modern adjuncts in the form of public baths and the like would be futile, and yet it is well to bear in mind that the original and broader idea of a park is that of an ideal place of temporary sojourn by the exhausted dweller amid the artificiality of modern cities. It should be a place of communion with nature and nature's God—a return to ideal primitive conditions made otherwise impossible by the stress of modern civilization—an ideal park is as unlike a modern baseball field as an upto-date hotel is unlike an old-fashioned New England home. There is recreation, inspiration and aesthetic culture in a broad expanse of land, developed along natural lines by competent artists such as cannot be obtained through any other agency, and the general effect of such a park may be like that of many a notable speech or sermon out of all proportion to the comparatively small numbers of persons who are originally inspired by it.

J. H. GRIFFITH.

METROPOLITAN PARK IDEA GROWS

An important addition to the park system of the state of Rhode Island is likely to follow the offer of Miss Ida M. Haynes of Tilton, N. H., to give to the state through the Metropolitan Park Commission eighty-five acres of land on Bullocks Cove for park purposes. The land is located about five miles south of the center of the city of Providence and will probably be included in the property acquired for the Barrington Parkway.

It commands fine views of the city of Providence, the Providence river and Narragansett bay.

The gift is a memorial to Dr. George B. Haynes of Valley Falls.

The members of the Metropolitan Park Commission have virtually decided to accept the gift and the work of development will follow the completion of the Barrington Parkway, now being built along the east side of the Providence river.

NATURALISM IN PARK LANDSCAPE

It appears that the idea of making over the natural conditions of land devoted to a park is not a new one. Many years ago a writer in Garden and Forest said:

"The care and satisfactory management and maintenance of public grounds is a more difficult work than their construction. The general design of the improvement may be clearly imprinted on the grounds, the controlling motive may be apparent, the beauty beginning to develop be appreciated, and it becomes a popular resort for the recreation it was in-

tended to provide. But many misunderstand its function, take little interest in the natural beauty of the landscape, look upon drives, rides and walks as more important features than the scenery in which they are set, see in the open greens only an opportunity for athletic games, in the woods only a resort for the usual picnic sports, and in the waters only facilities for rowing, sailing or skating, according to the season. So demands are soon made that permission be given to each class to indulge in the outdoor pastimes in which each is especially interested for the time being. Owners of fast horses want a speedway for racing sports, equestrians want the open stretches of turf for galloping on, hurdles to be set up for them to jump over, and a special section reserved for polo playing; bicycle riders want special tracks for greater convenience and for competitions of speed, and visitors on foot want the license of going anywhere at will and doing as they please.

"Others spy out a chance to advance some personal scheme of private advantage under the cloak of concern for the public good. Space is wanted for a merry-go-round for the amusement of the children. Some sharp slope is just the right pitch for a toboggan-slide or a coasting rink. An amphitheatrelike sweep of bank is coveted for spectacular exhibitions, circuses, shooting matches, etc., with all their paraphernalia of tents and enclosures. The smaller greens must be devoted to tennis and croquet, the larger to baseball and lacrosse, and the largest to military maneuvers and mass-meetings. Thus at every point usages creep in which are in many respects inconsistent with the conservation of natural beauty of the grounds, and in the end utterly destructive of its most attractive features.

"Similar damages arise from other causes. The owners or occupiers of the land adjacent to the park boundary become dissatisfied with their position at the back of the picture. They think it would be much improved (to them, at least) if the frame were knocked off. The effect to the public at large, who look at it only in front, is to them a matter of no consequence. So new gateways are urged wherever any plausible plea can be offered for them; openings in the border screen are wanted opposite the private view or to help the sale of the property. These schemes succeeding more or less, a combined raid is next made on the boundary fence, because "it is unsightly, it is useless, it is a relic of barbarism, a sign of aristocratic exclusiveness," and so forth. The grounds belong to the public, and they should not even seem to be shut out from their own. If removed, they may be trusted not to abuse the confidence reposed in them. The temptation to trespass would be resisted, and the proper gateways only would be used for entrance or exit just as before. The fence accordingly is removed, the

boundary is immediately overrun in every direction, the regular walks are neglected, tracks are at once beaten out in the grass on all the direct lines of passage, and all semblance of order vanishes from the grounds along with the last vestiges of garden ornament and finish.

"These usages are fatal to all artistic design, as shabby gentility is especially offensive to good taste. Their effects are more or less visible in all our public grounds, and most seriously deface what were originally the fairest portions. This has led to some reaction against any elaborate finish, and to a demand for simplicity to the extent of crudeness; all open grounds to be treated as commons, and all plantations as if they were natural woods. But the natural beauty of the simplest scenery is soon destroyed by such public usage. Therefore, whatever the style of improvement may be, it must be maintained intact after its kind, else all the money spent on it is worse than thrown away.

"In how many parks and cemeteries will the following description of its entrance apply?

"'A huddle of trees in clumps and showy shrubs and bits of grass, spec-

kled with exotics recently brought from the greenhouse and loudly confessing their homesickness, or splashed with gaudy pattern-beds of chromo-like vulgarity. The planter's one idea has been to get as much variety as he could within his narrow limits. As a result he has entirely lost the unity which alone can give value to variety.'

"There is no character or individuality; it is a place in which plants are grown, but not a place which, as a whole, makes any impression upon the eye, except to confuse and pain it.

"We can understand what Monsieur André, the French landscape gardener, meant when he wrote that most people's idea of gardening is 'the cleaning up of spontaneous productions,' followed by 'the accumulation of strange and dissimilar objects.' This is to say, that most people go to work in their gardens as they would in their houses, if, after moving out all the old furniture, they should bring in a bric-a-brac dealer's stock and arrange it as a bric-a-brac dealer prefers. Such a house would not be fit to live in; and many entrances to parks and cemeteries are, for the same reason, not fit to look at."

ASKED and ANSWERED

An exchange of experience on practical matters by our readers. You are invited to contribute questions and answers to this department.

Minor Disadvantages of Oil on Roads

In answer to G. B. S. in December PARK AND CEMETERY, the use of oil for dust suppression is now in general use in many sections of the country. I have heard similar complaints to those spoken of by G. B. S., but have not heard of a remedy, except that the dust being laid by the oil was so much more beneficial to all users of roads or driveways, as well as to nearby residents, as to offset any little damage to rubber tires, varnish or even clothing that might be done. Moreover, with the advent of the automobile, those in charge of roads and driveways had to look for a remedy to prevent the utter destruction of the roads by the automobiles. This remedy was largely found in the use of oil. Is it not up to the builder of the automobile to find a remedy for the prevention of the destruction of the tires, varnish or whatever else may be damaged by the oil? Perhaps he has already found that remedy. If not, I am sure he

Keeping Grass Cut on Large Lawns

In answer to the question of G. A. F. about keeping grass short on large lawns, I will say that the grass on areas in large or country parks does not want to be cut too short; in fact, an error that is too often made in the keeping of lawns is their being cut too short. If G. A. F. will try the one-horse Ideal Deering machine, set to its lowest and at all times kept in good running order, I think he will have found his remedy and throw off his objections to the ordinary hay-cutting machine.

In many large parks a flock of sheep are used, and these prove both ornamental and useful, with the occasional use of the Deering mower, to trim off any seed top that the sheep may miss, make a large park grass area or meadow a thing of beauty and a joy forever.

J. W. DUNCAN, Supt. of Parks, Spokane, Wash. Best Water System for Small Grounds

"What is the best water system for a small park or cemetery not connected with city mains?"—J. C. W.

PARK NEWS.

The park commissioners of Memphis, Tenn., have been making an appeal to the public spirit of the citiens to buy Jackson Mound Park and present it to the city.

Miss Ida M. Haynes of Tilton, N. H., in memory of her brother, Dr. George B. Haynes of Cumberland, who died last summer, has offered to the metropolitan park commission, Providence, R. I., a gift of a valuable tract of land, comprising between 80 and 85 acres, in the towns of East Providence and Barrington, to be used for park purposes.

The Educational Commission of the Methodist church decided on February 4 that the university should come to Dallas, Texas, and should be placed on the North Dallas or Highland Park site. The Dallas offer accepted is 133 acres for a campus and land for 2,000 city lots, estimated value \$1,500,000, and \$300,000 in notes.

The Boston Park Commission has approved the project to secure Cyrus E. Dallin's equestrian Indian group, "The Appeal to the Great Spirit," for the park system. It will cost \$12,000. The metropolitan park commission, Providence, R. I., has presented a request to the General Assembly for an appropriation of \$45,000 to carry on its work, and will also ask for the authorization of a bond issue of \$250,000.

Everett, Mass., is preparing to lay out and improve a park on the Mystic river. It is proposed to lay out playgrounds and walks, build a public boat house, bath house and dock on the water front.

A bill was recently introduced into the Idaho senate appropriating \$12,-000 for the purchase of a tract of 7,000 acres of land, formerly a part of the Coeur d'Alene Indian reservation, for a state park. The park, which is to be called Chatcolet Park, is in Kootenai country, near Harrison, and at the point where the St. Joe river empties into Coeur d'Alene lake. It is described as the most beautiful spot in Idaho.

The purchase by the state of Illinois of Starved Rock and 1,000 acres of land along the Illinois river for \$125,000 is recommended by the State Park Commission in a report submit-

ted to the legislature. As the Starved Rock project can be made available immediately for public enjoyment, the commission recommends it as more feasible than the proposed state parks in the white pine forest of Ogle county and in the mound region of St. Clair and Madison county.

Mr. William Rhodes, a veteran of the Civil War, and a much esteemed citizen of Fertile, Ia., has deeded to that town a fine park site. He has been a resident of the place for 50 years.

The Harrisburg, Pa., Capitol Park extension bill, presented to the Pennsylvania senate, calls for an appro-

priation of \$2,000,000.

Judge Whitney, of Toledo, O., who some months ago donated some 30 acres of land to that city for park purposes, has been spurring the authorities up to devise some means of raising funds to improve the park lands already held by the city for park purposes.

A bill has been introduced in Congress by Senator Taylor to provide for the creation of a new national military park at the battlefield of Stone River, to be known as the Stone River National Military Park and which would include the present national cemetery at that place and 1,000 additional acres of ground. which would in turn enclose the Confederate Union and battlegrounds; in addition to preserving present buildings and roadways there would be carried on under three commissioners the opening up of new roads to ascertain and definitely mark the lines of battle of all troops engaged in the battle of Stone River; to ascertain and mark the locations of the regular troops, and to erect monuments on those positions, which may be designated by Congress, plain and substantial historical tablets for the designation of positions and movements, etc. The preliminary appropriation for the carrying on of this work would be \$125,000.

In an effort to recover possession of a large park site donated to the Columbus, Greensburg & Richmond Traction Company, the town of Hartsville, Ind., has filed suit against the company in the Bartholomew circuit court.

The city council of Mabton, Wash.,

has accepted the land for its first city park, a gift by Mr. and Mrs. C. B. Alexander and Mr. and Mrs. Fred Phillips, and steps are being taken to improve it. The donation was secured through the Woman's Civic Improvement Club.

Authorization of a county appropriation of \$100,000 for a park at Belleville, N. J., will be sought from the Legislature, probably during its present session. Action along this line was taken at a recent meeting of the Board of Trade of the township.

Governor Aldrich, of Nebraska, has prepared a special message asking both houses of the Legislature to memoralize Congress and the secretary of the interior to take favorable action on H. R. No. 6757, introduced in Congress by Congressman Hinshaw of Nebraska. This bill provides for an appropriation by Congress to purchase the Daniel Freeman homestead in Gage county, Neb., for use as a national park.

Members of the Social Workers' "Back to the Land" movement, believing that some of Los Angeles' parks should be utilized for the maintenance of the poor and the teaching of self-support, are asking that a portion of Griffith Park be set aside for the establishment of an experimental farming school and home center, to be operated under the direction of a commission and directed upon the same plan as are the national Indian government school communities.

A bill has been introduced into the New York Legislature at Albany providing that Cropsey avenue, in the Borough of Brooklyn, from Bay parkway, Twenty-second avenue, to Fourteenth avenue and Dyker Park, shall, from the passage of the act, be under the exclusive charge of the Park Commissioner of New York City. The parkway is hereafter to be known as Bath Peach parkway. The bill provides that no street surface railroad or other railroads shall be constructed along this parkway.

PARK IMPOVEMENTS

The City Beautiful Club, of Vicksburg, Miss., will undertake the improvement of the pretty little park on the river bluff at the eastern terminus of Broadway. The city engineer has in preparation a topographical map of the park and this will be sent to a landscape artist in the east.

The Park Commission of Syracuse, N. Y., have arranged a plan for the expenditure of \$100,000, provided by a bond issue, for permanent park im-

provements. Nearly all of the amount will be used in pushing toward completion the four large unfinished parks of the city, Schiller, Lincoln, Kirk and Onondaga, in about equal amounts. Small sums will be used in finishing work in Burnet Park and at the Frazer School playgrounds.

The council of Pasco, Wash., has decided to plant trees along both sides of the principal streets at the city's expense.

Senator Works of Mankato, Minn., has introduced a measure in the Minnesota legislature providing for the appropriation of \$5,000 for the improvement and maintenance of the Minnesota State Park; \$1,000 for sinking a well upon it; \$2,500 for repairing and constructing a road into the park, and \$1,000 for salary of the superintendent, erecting a fence and planting trees.

A sandy hillside at Trowbridge street, Grand Rapids, Mich., an unsightly spot, is to be improved by an ambling stairway and the planting of trees and shrubs. Some public spirited women, among them Mrs. Thomas Peck and Miss Rebecca Richmond, purchased some lots and donated them to the city.

NEW PARKS

The special park commission appointed to select suitable sites for additional parks and playgrounds for the West Side, Chicago, made its report and the purchase of two sites will be made at once. Each of the two parks will contain about eight acres and the work of laying out the grounds will be begun as soon as possible.

Joseph Sears, millionaire founder of Kenilworth, Chicago, has given to that suburb a beautiful public park and a large school site valued at \$23,000.

Youngstown, O., has, by gift of several property owners, another park of some 42 acres. The land was given through the Realty Trust Co. and it will be named Crandall Park.

Manistee, Mich., has secured a city park by purchase.

Initiatory steps have been taken by the Milwaukee Common Council for the purchase or condemnation of a large amount of land on the east and west sides of the Upper Milwaukee river. A public park is to be made of the picturesque Milwaukee river land, affording an uninterrupted frontage of not less than six miles and providing a park for Milwaukee corresponding to the famous Hudson River Park. The cost of the project at this time is estimated at \$1,050,000.

It is declared the Socialists have already acquired 60 per cent of the options. It is proposed to submit the project to a vote of the people.

William D. Packard's effer to present the people of Warren, O., with a park at a cost of \$16,000 to himself, and in addition give \$4,000 toward improvements, provided the city would spend \$30,000 for improvements, has been accepted by a vote of 3 to 1. The property is known as the Kinsman farm, comprises 43 acres and is located about a mile from the business center of the city.

A resolution was recently passed by the council of Davenport, Ia., making a demand upon the Tri-City Railway and Light Company, owners of Prospect Park, to give to the city a deed to the property. This clause was included in the franchise of the street railway company, the city having the right to take over the park grounds at any time it sees fit to do so.

The recently purchased 97 acres by the city of Frankfort, Ind., for a public park, is to be improved. A landscape architect will prepare plans.

The new park system of Dayton, O., is to be enlarged by parking an area at the junction of Lorain and Nassau streets. The improvement will be an important one.

Officials of the Lackawanna, Delaware & Hudson, and Ontario & Western Railroads have under consideration the request of Mayor John von Bergen and Mrs. J. Benjamin Dimmick, president of the City Improvement Association, of Scranton, Pa., that they donate 700 acres of unimproved mountain land to Scranton for park purposes. The land is on the mountain range, which flanks the city on the west, and it has been acquired by the companies for mining purposes.

The property of the Corn Products Company, Glen Cove, L. I., which has been an eyesore to the community for years, has been purchased by a group of prominent citizens, and after it has been improved will be presented to the town as a public recreation place.

Congress Spring Park and Mineral Spring at Saratoga, N. Y., has been purchased by the Park Commission. The purchase of the property is a part of the state reservation of mineral springs, the taxpayers having voted \$250,000 to create a public park in conjunction with the reservation. The village paid \$100,000 for the property, which is one of the most attractive places in Saratoga Springs.

Visalia, Cal., has purchased the city residence and grounds of the late F. E. Hyde, and will remodel it for a city park. It will be named Hyde Park in consideration of the low price asked for the property, \$8,000, considerably less than its value.

FROM ANNUAL REPORTS

The twelfth annual report of the Commissioners of Hopedale, Mass., for 1910, gives an encouraging outlook for a small park department, where the available funds amount only to some \$2,500 yearly. The pamphlet is illustrated with full page halftones. The report states that the various utilities were patronized more than ever before, a fact very gratifying to the commission. An effort is made in this town to supply food for the game and song birds, not only to preserve them, but to attract them to the park territory. Much time was expended in the work of destroying the Gypsv and Brown Tail moths, the expense of which was borne by the park department.

The annual meeting of the Home Gardening association of Cleveland. O., was held recently and reports showing the varied interests and activities for 1910 were presented. The Charles L. Paack prize was awarded to Carl Grundman, who is now a student at Ohio State university. This prize is sufficient to cover the necessary expenses of the winner at the university. The award is made upon the conditions that the boy devote three years to practical work in the training gardens, in competition with seventy other boys, and cultivate a vacant lot one year. The officers of the association were re-elected for another year: E. W. Haines, president; Lucy B. Buell, secretary; Starr Cadwallader. treasurer; G. H. McCollum, superintendent.

ZINC PLANT LABELS

Francis J. Wooley, in the "Weekly Florists' Review," gives the following formula for an ink for zine labels:

Bichloride of platinum, fifteen grains; distilled or soft water, one ounce; hydrochlorie acid, five drops. Use a quill pen. This mixture must be used on labels of zine only. The zinc should be elean and free from grease. The ink is yellow, but turns black in a few seconds after touching the zinc. Bichloride of platinum can be bought of any of the large dealers in chemicals. If the writing on the zine appears in time to grow dim, wet the labels and it will become clear again.

I RILLS TO THE SANDSCAIRE GARDENING

STUDY OF CONTINENTAL LANDSCAPE GARDENING

An address by Albert D. Taylor before the Massachusetts Horticultural Society, with Stereopticon Illustrations.

In making a study of continental landscape gardening, one finds that the field to be covered must be considered from a quite different viewpoint than would American landscape gardening be considered. This art as seen on the continent has flourished in varying degrees of intensity for a number of centuries, and unlike the art in the American field, the growth of which spans but a few decades, it has not continued to develop along a consistent path for any great number of years free from the impeding influences of outside factors. In our own country there are a few wellknown exponents of the art whose dominating influences have raised it as such to the high standard of today. The names of such men as Downing, Repton, and Olmsted are those which we at once associate with its progress. We need but study the lives of these men to understand thoroughly the history underlying and affecting the growth of the field in America up to the present day.

To cover comprehensively the European field in which the growth has been affected in widely different ways, the student must first bring to light the factors most potent in its history. I would not infer that by so doing I would advise making a complete historical study. It is only by such an investigation that one brings to light, not the names of a series of individuals, but rather a number of dominating influences which have been the important factors in its development. These are three in number, and may be termed as: chronoogical, geographical, and political; each having its important bearing upon the varying character of continental landscape gardening.

To understand more clearly the meaning of these adjectives in their relation to the art, we first must understand that from a chronological viewpoint, the gardens of ancient Italy are but the forerunners of those

typical of the great Renaissance which in turn leads us down to the gardens of modern Europe, many of the best examples of which are but those of the great Renaissance period preserved more or less carefully to the present day. From a geographical standpoint we must consider the wide variation in the topography of the different garden spots on the continent, ranging from the rugged landscape of Italy to the great flat expanses of country seen throughout France. This topographical variation had its marked influence on the general design of the gardens laid out in these different countries. Last but not least, the political influence brought to bear by the different rulers-emperors, popes, cardinals, and kingsaffected the development of this art



MAIN ENTRANCE DRIVE TO HISTORIC VILLA OF HADRIAN The Brick Retaining Wall was Originally Covered with Marble.

in a way little dreamed of by the superficial observer. This influence was most marked in Italy from the days of ancient Rome up to and through the period of the high Renaissance, extending well into the 16th Century; there being but one notable illustration in the French history, namely, the Great Gardens of King Louis the 14th, surrounding the palace at Versailles.

Now that I have defined the influential factors to be kept in mind during this discussion, let me say that while it is no difficult task to study the modern gardens of our own country and from that study to formulate well-marked conclusions upon the existing and the growing tendencies of the profession today, I freely confess that it is with a great deal more difficulty that one is enabled to formulate conclusions concerning the status of the foreign art.

To study continental gardens and their relation to the growth of this art, it is necessary to confine ourselves not alone to the modern practice, but to turn back into the pages of history for authentic information. Strange to state the more we delve into the history of the subject the better informed we become with refrence to its status as existing in Europe today. This is not often a generally accepted fact, but to the careful observer it at once becomes a stern reality.

It is my intention in the following discussion to confine my thoughts specifically to two great nations, a study of the gardens of which practically covers the field of continental gardening. These countries are Italy and France, in which the art has had its most marked development. It is from these countries, too, that the other countries probably have obtained their inspirations for the development of the art. The lover of gardening might dwell for hours on the numerous details of the notable

examples to be seen in the beautiful villas and chateaux of France and Italy, which are truly continental. I can, however, within the limited space at my disposal but cite the best examples and draw a few general conclusions from those.

As above stated, the clearest conception is to be obtained by tracing carefully its growth from the beginning in ancient Italy.

One would do well to go back even farther than this into the gardens of Egypt, Persia, and Greece and study the gradual development up to the days where we begin. Suffice to say, it is from these countries that the art gained its initial inspiration. I would therefore first have you study with me the great masterpieces remaining to us from the early Christian era; such as have been partially spared to the present generation in varying degrees of preservation. Beginning with the celebrated gardens of Pompeii, once obscurely buried



RUINS OF OLD WATER ORGAN AT VILLA D'ESTE.

beneath the ashes of Vesuvius in the year 79 A. D., but long since brought to light through the efforts of the Italian Government, and restored with all due care, one finds a typical garden of ancient Italy. These gardens, filled with their miniature statuary and basins, and enclosed by colonnades or porticos, all being beautifully carved in Italian marble, served as the outdoor homes of the aristocracy of that small city in those ancient days. Here in these small enclosed gardens, amply well supplied

with vines and flowers, the wealthy families of Pompeii bathed in the sunshine and feasted upon the mural paintings surrounding the small rectangular enclosure. All of these gardens were on a miniature plan yet unquestionably harmonious in every detail. They represented the first real attempt at gardening which was undertaken by the wealthy class.

They are but one type, however, of the ancient gardens. There are left to us today, two other types widely differing in their architectural detail and their adaptation of design to the specific needs of their creators. These are represented in the picturesque ruins of the Villa Tiberis situated on the summit of the little Island of Capri, far out in the beautiful bay of Naples; and in the magnificent ruins of the wonderful Villa of Hadrian situated far across the great expense of the Roman Campagna, among the Tivoli hills. From the ruins of these two equally historic Villas the student sees in the decaying skeletons, an indication of the elaborate detail both in the architectural and gardening sculpture of that period. I refrain from mentioning in detail the much-heralded Villas of Pliny at Laurentum and at Tusculum for the reason that today there remains nothing on the site of these villas to tell the student of their original design. It is only from descriptions, and from the fine bits of statuary unearthed, and now the pride of various European art galleries, that we can picture their once beautiful splendors. It is not so with the great Villas of Hadrian and of Tiberius, each of which at one time was the magnificent home of a Roman Emperor. It is here that the observer can ponder for hours, building in his imagination the pictures of beautiful entrance courts, stairways, baths, dignified marble-faced avenues, Greek theatres, and garden courts from the ruins scattered on every side. To be sure there is at best very limited ruins which would give to the student more than a real glimpse into the many beautiful conceptions of the design and sculpture which was the life of these gardens. The present generation is fortunate in having preserved for them even the little which we can study in these villas today.

These great villas are the landmarks of Ancient Italy and of the Roman Empire. They flourished during a period when the Emperors ruled supreme and the freedom for the exercise of an artistic temperament was at its best, with unlimited wealth and power at the disposal of these men. It was during these early centuries that such garden creations as those above cited were laid out, only to be devastated and robbed of their wealth of sculpture in the centuries of the dark ages that followed, when art in all Europe remained stagnated. Beginning with the dethroning of Augustus as Emperor by the Ostrogoths in the fifth century A. D., the death knell of gardening as an art was sounded. From then until the days of the early Renaissance marked by the beginning of the fifteenth century, this entire continental country was the scene of warfare and invading tribes. The constant turmoil between the empire and the papacy in the individual struggles of each for supremacy, left deep imprints on the history of the country. The invasions of the various foreign tribes including the Lombards, the Franks and many others from north of the Alps, not only served to strip the country of all artistic tendency but removed from those great creations of the garden world already existing much that was at one time the pride of emperors.

Art, as such, cannot flourish under the adverse influences of unsettled social conditions; it is an evidence of prosperity and social harmony. The only evidence of the least tendency towards art in the gardening world during this long period is to be seen in the Monastery gardens. This much unsettled condition led to the establishment, by little bands of people known as monks, a number of monastery gardens. These monasteries established by St. Gregory and St. Benedictine grew through the natural desire of certain orders of monks to be away from the open exposure to political warfare, and to live in their own communities without fear of molestation. Situated among the hills of France and Germany, and at a later date in the lowlands, these self-supporting communities practiced the art of gardening merely as a means of support. . No pretense from the standpoint of a decorative art was made. While this barren period of garden history is far from interesting to the student as such, it is a portion which bears an important relation to our discussion. Society, as such, having been demolished, business and commercial interests remaining unstable, the country showed but little evidence of progress. 'It seems necessary that we should cite this bit of history as a connecting link between the decline and the new birth of the continental art. Gradually social conditions changed, commercial prosper-



PORTION OF VILLA OF HADRIAN AT TIVOLI.

ity in various citics flourished and with both the desire for homes out of the city became stronger. Small cities such as Florence, Venice, Bologna, Milan and others gradually emerged from this darkness as brightly illuminated spots of thrift in their relative commercial industries. It was thus but natural to assume that with this opening of the Renaissance period in the fifteen century, cyidenced first in northern Italy, the art of gardening should again flourish with the other arts.

Florence became the focal center of this outburst of art in general, and the villas seen today overlooking the city and the Arno were many of them conceived at this very period. The motives which inspired their construction were similar in character to those evidenced in our great American cities today, namely, the desire to be away from the turmoil and the atmosphere of city life. From this period on, new life spread rapidly and the result was that for a period of more than two centuries Europe was the scene of an unprecedented tendency to build country homes for both winter and summer use. These beautiful villas were established among the hills of Northern Italy and Switzerland, around the lakes, and on the shores of the Mediterranean.

Hand in hand with the development of art in sculpture and painting went this great gardening movement. The Medici family, which was the ruling power in Florence—at that time the art center of Italy—caused to be built the beautiful Villa of Poggio a Caino and others just outside of the city limits. These villas were but the modest forerunners of a score of elaborate villas built at a later date and seen today throughout Italy.

(To be concluded.)

PRACTICAL HORTICULTURE IN NORMAL SCHOOLS

The introduction of agriculture as a special department in normal schools marks a step in the history of horticultural education that has great significance. An interesting illustrated bulletin on this subject has just been issued by the Colorado State Normal School at Greeley, Colo., that explains the point of view of this new educational work and describes in detail the courses and the work of this school in agriculture, school gardening and outdoor art.

The Colorado State Normal School is especially well fitted for training teachers for teaching outdoor work in rural communities. At this school the effort has always been to interest all in nature and country life.

The courses here fall into three groups: natural science, agriculture, and the rural home and community.

The course given in School Gardening, Outdoor Art, and Plant Production aims to teach the meaning of the school gardening movement and the relation of gardening to nature study and elementary agriculture. The school garden is the laboratory of nature study and agriculture. Practice in garden handicraft and in planning and planting the school garden is given. Plants and soils are studied and the management of soils in crop production. Some of the other work practically studied includes: Propa-

gation of plants; seedage, cuttage and graftage; the principles of landscape improvement applied to school and home grounds; how to beautify school and home grounds; studies of the best native and introduced decorative plants.

The school gardens, nursery, greenhouse, problem farm and the campus present actual problems and experiences, and the children are made to work, actually to dig, plant, cultivate and care for their crops. In this way they get some fundamental principles of gardening and agriculture, of ground preparation, fertilization, rotation, seed sowing, seed selection, care and management of crops.

H. W. Hochbaum, head of the department of agricultural education, is author of this bulletin, from which we show an illustration of the school's work in ornamental gardening.



ITALIAN GARDEN ON CAMPUS OF COLORADO STATE NORMAL SCHOOL, GREELEY, COL.

NEW FOREIGN PLANT AND SEED INTRODUCTIONS

From an Illustrated Address Before the Society of American Florists by Peter Bissett

The Office of Foreign Seed and Plant Introduction of the Bureau of Plant Industry, U. S. Department of Agriculture, was established for the purpose of introducing new or rare seeds and plants that gave promise of being valuable in creating new industries or improving those already introduced. This work has been carried on by the Department for many years, and many notable introductions have been made in that time. The California orange growers say that one of those introductions, the Navel Orange introduced from Bahia, has been worth more to that state than the total cost of maintaining the Department of Agriculture since its inception. This is only one of the many valuable plants that have been introduced, but the same story is true of the Smyrna Fig, the Jordan Almond, the Date, Durum Wheat, Corn and, in fact, every one of our great plant industries. They have all received benefit from this great introduction work.

Another phase of the work of Plant Introduction is the importing of plants or seed that will be used by hybridizers to improve those we already have. The introduction of new varieties of our cultivated plants is one of the most important works of the office. The tendency of plants to vary, giving us innumerable varieties. is recognized as of the greatest importance. Even the success or failure of a whole industry will depend upon a slight difference that the ordinary observer would fail to detect While we have a great number of plants that have been raised by plant breeders in America that are very valuable, the fact remains that the greatest percentage of our crops are of foreign origin. When we consider that of all of the food plants now grown in America, only the pumpkin and a few grapes, plums and berries, are native of this country—even the indian corn that is generally thought to be indigenous to the United States is, in all probability, an introduction from China into Mexico and thence to this country-one begins to realize how important a work plant introduction is.

In this great country we have all conditions of soil and climate, from the temperate to the subtropical, from the moist to the desert and arid sections of the southwest; therefore we have soils in which will grow

nearly all of the great crops of the world, and it is the work of the Office of Foreign Seed and Plant Introduction to secure the plants best suited to the various conditions of the widely diverse sections of our country, and by growing and distributing those plants, demonstrate to the farmers what they can do with these new introductions. At the present time the office is giving especial attention to introducing material likely to prove adapted to the great southwestern sections of our country where semiarid conditions exist, and to such sections where a considerable amount of alkali is present in the soil.

Amongst the seeds and plants that come to us we very often get trees and shrubs that are especially valuable for ornamental plantings in the different sections of our country. It is to bring to your attention a few of these introductions that I am present with you tonight. Most of the pictures that I will show were taken where the plants were discovered, so that you will see them at maturity and get an idea of their possible value to you in your park plantings. This material comes to the Department from its own explorers in the field, from the American Consuls, from missionaries and co-operators located all over the world. Such material as reaches us in small quantities is first placed in the hands of the propagators at our various introduction gardens, and then distributed to private and public parties who may be interested in them and who request them, in the various sections of the country where they are likely to do well.

The following were the plants illustrated:

Pistacia chinensis: This photograph is of a female tree about 60 feet in height, growing in the Wuchang gorge of the Yangtse River. The pistache is a fine, ornamental tree which will be appreciated in the mild-wintered sections. The Chinese press from the seeds an oil for burning purposes. It is a large, ornamental tree with graceful foliage.

Cupressus torulosa: This picture was taken in the valley of the Tung River on the China-Tibetan border line.

Sapium Sebiferum, or Tallow Tree: This photograph was taken near Kiating, China. It grows plentifully in the neighborhood of Shanghai, China. This species is now cultivated in many warm regions and has already been naturalized in the southern States, being hardy as far north as the Carolinas. In its native land the wax coating of the seed is used for the making of candles, while its hard, white, fine-grained wood is used for carving, incense, etc. In general appearance the tree resembles our common aspen, and in the autumn, owing to its beautiful deeply colored leaves, it makes

a very striking ornamental. It grows in almost any kind of soil, but responds readily to good treatment.

Canarium Album Roensch: This photograph was taken near Kia-tung-fu, China, 11,000 feet elevation. The fruits of this tree are called Chinese Olives. The plant is grown in orchards on the river bank near Canton, and forms a very important article of commerce.

Eucommia Ulmoides Oliv: This photograph was taken at Patung, Hsien, China, at an elevation of 1,800_feet. It shows a male tree about 30 feet in height. Cultivated in Western Hupeh and Szechuan at altitudes between 1,000 and 4,500 feet. The tree is valuable for its bark, which constitutes the native drug "Tu-chung". The bark, leaves and fruit contain a silky, elastic fiber composed largely of caoutchouc-like substance.

Gleitsia (unknown): This photograph was taken at San-yu-tung, near Ichang, Western Hupeh, China. Tree 50 feet in height. Pinus Armandi: This photograph was

Pinus Armandi: This photograph was taken in Western Szechuan, China. A new, comparatively dwarf pine from western China.

Aleurites Fordii: "Tung-shu" or Wood Oil tree. This photograph was taken at Feng-tu. Hsien, on the banks of the Yangse River, China. The nuts of this tree are the source of wood oil, which is being imported in large quantities and used in the manufacture of paints, fine varnishes and soaps. The tree itself is of stately appearance, averaging 20 feet in height, with green, smooth bark, large heart-shaped deciduous leaves, the spreading branches making it one of the finest of shade trees. It has been styled, and worthily so, "The national tree of China." The tung-shu flourishes throughout the Yangtse valley, in latitudes 25° to 34° north. It is said not to bear nuts, however, when subjected to temperatures as low as 20° F.

peratures as low as 20° F.

Actinidia Chinensis, Yang taw: a hardy, climbing, deciduous shrub, strong growing and excellent for covering arbors, trellises, walls and low buildings. species is considered the most ornamental of the genus from a fine foliage point of view. The leaves are large, heart-shaped, dark green on the upper surface, bright reddish color and densely tomentose beneath. The fruit borne hy this species is about the size of a hen's egg, full of meat and fine seeds very similar to the gooseberry or fig, with a fine, leathery, hairy cover. When it has been picked and left to soften, it is said to be very fine, having the flavor of the gooseberry, fig and citron combined. It also makes delicious pies, jam and sauce.

Davidia Involucrata: This photograph was taken in China. It is a most striking tree when covered with its pure white bracts, in which state it is conspicuous at a great distance. The tree attains a height of 20 to 30 feet and has proven to he perfectly hardy in the neighborhood of Washington. It is found growing on high elevations in central China, where they have quite severe winters. This tree in full flower is a marvelous sight, owing to the alternate white and green color caused by the large bracts intermingling with the leaves. Our foreign explorer, Mr. Meyer, tells me that this is one of the handsomest Chinese flowering trees.

Rosa Soulieana: This photograph was taken in Kuan Chai, near Monkonongting, China. A Tibetan rose bearing clusters of small, white flowers,

Quercus Serrata: This photograph was taken near Hanchow, China.

Diospyros lotus: This photograph was taken at the foot of Fei-yuehling, Chingchi, Hsien, China, at an elevation of 5,000 feet. This is a long fruited, wild persimmon. The fruits are small and not borne in great quantities. It is quite an ornamental tree and also valuable as a stock plant for grafting the large seedless persimmons.

Nelumbium: Showing one of the semi-

Nelumbium: Showing one of the semi-double, pink forms. This is inclined to a cup shape and does not open flat. The flowers are from 4 to 6 inches in diameter. The plant grows to a height of from 3 to 8 feet, and is almost identical with Nelumbium roseum plinum.

Tilia Caucasica: A very tall and beautiful specimen growing in the Botanical Gardens at Souchoun Kale, Caucasus, Russia, It comes to us highly recommended as a shade tree.

Litchi Chineusis: This is a Chinese leitchee, the nuts of which are imported in large quantities into the United States.

Camoensia Maxima: This is probably one of the most delicately beautiful vines in the world. It requires a tropical climate or greenhouse culture, however, to bring it to the flowering stage.

Ipomoea Horsfalliae Briggsii: This is a beautiful red-flowered evergreen morning-glory native of South America. It is suitable for greenhouse culture in temperate climates. It will flower out of doors, however, if carried through in pots during the winter months and planted out as soon as danger from frost is over. This photograph was taken in the Department greenhouses at Washington.

Zizyphus Sativa: This shows you a rather strange variety of Chinese date. These trees are very rare and are highly prized by the Chinese.

Japanese Iris: A collection of Japanese

Iris growing on one of the trial grounds of the Department of Agriculture at Washington, D. C., which was introduced a number of years ago.

Astrapae Wallichii: A beautiful ornamental tree with pendant clusters of pink flowers. These clusters are as large as those of the Viburnum, but more delicate. It is propagated easily from cuttings.

On the grounds surrounding the German Legation in Pekin, the small sedge, Carex Stenophylla, is used as a substitute for grass. This Carex grows two to three inches in height. No lawn mower is required, and it stands drought remarkably well.

The next two pictures will show a new variety of Rosa Spinosissima that our Mr. Meyer discovered in China. This is a very beautiful semi-double form, bright yellow color, similar to Harrison's Yellow, but flowering from two to three weeks earlier.

The next picture will show you a remarkably tall willow about 90 feet in height, from North Korea. In the young stage the bark of this willow is white, but as it gets older this color disappears and the bark becomes shaggy like an eucalyptus tree.

The next is a rather beautiful flowering lonicera that was sent to us from Russia. It is a shrubby form with beautiful yellowish white flowers, and one that will be very valuable for ornamental plantings when we have it in sufficient quantities for distribution.

A very beautiful specimen of Juniperus Foetidissima was found in the mountains near Geok-Tafa, Caucasus, Russia. This Mr. Meyer recommends as especially well adapted to the arid regions of our country.

The next four pictures will show you the

white-barked pine, **Pinns Bungeann**, which is a very interesting addition to our confers. The first is an extremely large specimen estimated to be about 500 years of age, measuring 10 feet in circumference five feet above the ground.

Pinus Bungeana, 30 miles northwest of Pekin; A gigantic specimen of Pinus bungeana, measuring 21 feet in circumference six feet above the ground, and estimated to be 1,200 years of age.

A picture of the only specimen of Quercus Mongolica that Mr. Meyer found for hundreds of miles around. Growing near Tse-king-kua, China, This he says is apparently a survival of a splendid former vegetation, before the greedy Chinese had destroyed every bit of arboreal vegetation.

A beautiful grove of Phyllostachys Mitis growing near Hankow, China. The Department has introduced some of these bamboos in large numbers and we hope soon to be able to show in Louisiana and Florida a plantation similar to that on the screen. We have already planted five acres at Brooksville, Florida, and expect to increase this planting to twenty acres. We have also planted at Avery Island, Louisiana, one acre, and hope to increase that planting to a considerable extent. It is the hope of the office that a new industry will be developed in the use of these bamboo timbers in house construction, fence posts, in making furniture, barrel hoops, etc.

A very handsome specimen of the large leaved evergreen privet, **Lignstrum Lucidum**, grown near Hankow, China. This privet is a very valuable one for hedges and for windbreaks in Florida and throughout Texas.

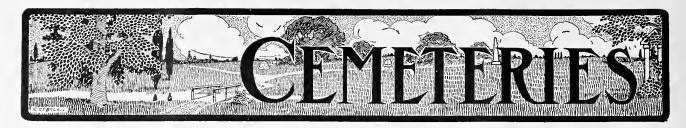
THREE NEW TREE AND LANDSCAPE BOOKS

Three new books on subjects pertaining to landscape architecture, and trees will add substantially to the literature of practical landscape art and outdoor improvement that is growing so rapidly in our periodical literature,

"Shade Trees in Towns and Cities," by William Solotaroff, the efficient superintendent of the East Orange, N. J., Shade Tree Commission, is a practical manual of every branch of the work of street tree planting and care, drawn from the author's long experience in the remarkably successful tree work that has been accomplished in East Orange as has been told in these pages on several occasions. East Orange had the pioneer Shade Tree Commission and the practical methods developed there by Mr. Solotaroff have been the guide to some thirty-one similar organizations that have since grown up in New Jersey and have been of substantial assistance to advancing the work of this department in many cities in other states. The growing demand for a compendum of methods that have been worked out in shade tree practice has led Mr. Solotaroff to prepare this book and certainly no one could have been better fitted by training and experience for the task than Mr. Solotaroff. The book contains 287 pages and is profusely illustrated with, photographs, diagrams, forms and anything that could assist in throwing light on the subject. It is published by John Wiley & Sons, and sells for \$3.00 net.

"The Care of Trees in Lawn, Street and Park" with a list of trees and shrubs for decorative use, by Bernhard E. Fernow, of the University of Toronto, is a volume of the American Nature Series. The author has long been associated with the School of Forestry of the institution mentioned, and has an intimate acquaintance with trees. The writing of this book was an accident due to an inquiry from a tree owner for expert advice. Mr. Fernow discovered that no satisfactory comprehensive treatise on the subject could be found for amateur planters of trees. This induced him to set down briefly what he considered every tree owner should know of the care of trees. The writer's training and experience made him particularly fitted for the work of selecting from the vast fund of information in many different sources that which would be most useful for the readers for whom this book was intended, namely the practical lover and owner of trees. To acquaint owners with the more sensible care and attention their trees demand and to give them advice and first aid to the proper methods of conserving and planting trees is the primary object of this work. The book contains 392 pages, many illustrations and sells for \$2.00. It is published by Henry Holt & Co.

"Landscape Gardening Studies," by Samuel Parsons, landscape architect of the New York City parks, is a series of entertaining and valuable studies of actual landscape problems that have been carried out by the author. It is published by John Lane Co., and sells for \$2.00. The book contains not a little illumination of the art of landscape architecture in its series of practical accounts of what its author has done in specific instances. The outline he gives of the general design of Central Park and, in more detail, of certain parts of it, will enhance for all who read it the beauty of the city's best-loved famous playground. A great number of particularly fine views illustrate the text. Questions of beautifying roads, parks, homes, lawns, and playgrounds, and of the treatment of special soils, are interestingly considered. Any of these books may be ordered from Park and Cemetery at publishers' prices.



PENALTY OF TIMIDITY IN CEMETERY PLANNING

People are tender toward their dead. In the presence of the great mystery the warmest feelings of the heart are quickened. It is natural that a desire should be awakened to do something in memory of those who have passed away. The most beautiful and most natural expression of this tenderness is in some personal touch in connection with that last resting place. The movement to make more attractive and beautiful the homes of the dead if properly exploited, will always find a sympathetic chord in the hearts of the people. Judging from the condition of rural cemeteries, this does not seem to be true. But the fault lies in a proper education of the sentiments which are ready to be awakened into activity by the proper touch.

On the part of the management of rural cemeteries, the reason for the lack of embellishment lies largely in the fear of not getting returns to carry on a continuous work of this character. There is a certain timidity about making an investment of this character, which should be overcome. There is a lack of recognition of the sentiment which exists and which only needs to be awakened to find its legitimate expression in tasteful embellishment. In certain country gravevards that I know, if 20 years ago a little taste had been exhibited in rendering the entrance attractive and in establishing certain areas entirely devoted to purposes of ornamentation, the suggestions would have found their way to individual lot owners, and where now we have simply a waste of uncared for space, we might have had park-like effects which would have been the pride of every lot owner. The small initial expense would have been met a thousand times by the growing interest manifested in the sale of lots—in the appreciation in the values of lots to be sold.

The way to educate a rural community in a manner to bring about desirable results in cemetery management, is through state cemetery associations which shall suggest some simple, practicable ways of educating communities with reference to what constitutes an attractive rural cemetery. Object lessons are the best possible argument in favor of the adoption of simple landscape methods in the management of cemeteries.

Judging from the appearance of a large number of country cemeteries, the management thinks it is necessary to have the stakes defining the limits of lots, strongly in evidence. It probably never has occurred to many managers that this is entirely unnecessary, and the lots can be more easily cared for and more attractive if these markings are entire-

ly beneath the surface.

It is just as certain that many people in charge of these cemeteries honestly think that an evergreen cut into some artificial form is more in accord with a place of sepulture than a group of shrubs naturally arranged.

It probably never has occurred to many village and town cemetery managers that a drive around the outside of the cemetery is economically the poorest possible arrangement. And that it is a more appropriate remembrance of the dead to have a group of pretty shrubs above the grave of the departed, than to have an unsightly mound. People are not always blameworthy for what they do not know, and I am glad to have State organizations that shall enable people who are in the management of cemeteries to come together and learn about the very best attributes of modern cemetery management. With so fine an opportunity available for education in simple and attractive methods of handling rural cemeteries, those who do not avail themselves of the opportunity and become better equipped to do their work, will certainly be blameworthy.

CHARLES W. GARFIELD. Grand Rapids, Mich.

CEMETERY

SMALL TOWN MAKES FINE PARK PLAN

Hillside Cemetery, Torrington, Conn., is a striking example of what a small town may do in the development of a beautiful lawn plan cemetery, where leading public-spirited citizens get back of the movement from the start and develop the grounds on a thorough-going lawn plan with expert direction. The views shown herewith speak for themselves and tell of what has been accomplished in the making of good land-scape effects.

It is estimated that enough of Hillside Cemetery is now developed to fill the need of the town for at least fifteen years. Previous to the completion of this new burial place the people of the town were dependent on the grounds of the Wolcotville School Society Cemetery, a small tract of land situated in what is now the center of the town. This cemetery has been in use for nearly a century and little available space remains for burial purposes. A worthy movement is now on foot to secure an endowment for the maintenance of this cemetery.

About three years ago several citi-

zens interested in the welfare of Torrington were fortunate in obtaining as a gift a desirable tract of land for cemetery purposes. The Hillside

for cemetery purposes. The Hillside Cemetery Association was then incorporated and subscriptions for the development of this ground were received from individuals and from the manufacturing concerns.

With commendable foresight the association obtained the services of Olmsted Brothers, landscape architects, to plan for the complete improvement of this sixty-five-acre tract. From these plans six sections

have been developed for cemetery purposes, while the remaining ground has been cleared up and is used as a quiet woodland park.

In the improvement of the grounds it was found advisable to fence the entire property. At the entrance a pleasing gateway and piers of weathered field stones have been built.

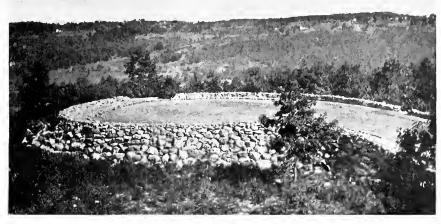
An interesting feature of the cemetery is the use of the eastern portion as a park. Walks lead through picturesque woodland. An outlook at a high point gives a delightful view of the Naugatuck valley.

Altogether about \$50,000 has been spent in the work of creating a beautiful cemetery.

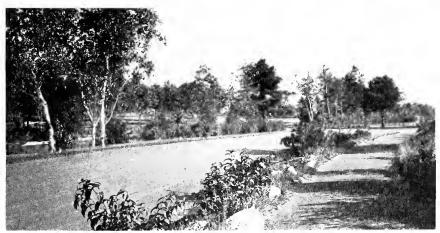
The Hillside Cemetery Association is purely a benevolent enterprise.



WOODLAND WALK AND STEPS, HILLSIDE CEMETERY, TORRINGTON, CONN.



"THE OUTLOOK," HILLSIDE CEMETERY, TORRINGTON, CONN. Olmsted Bros., Landscape Archs.



ENTRANCE DRIVE, HILLSIDE CEMETERY, TORRINGTON, CONN.

The association has no capital stock and is for no other purpose than to improve and care for the grounds. Every lot and single grave receives perpetual care, the entire proceeds from the sale of lots now being set aside for that purpose. When the cemetery becomes self-supporting it will, to a large extent, become self-developing.



ENTRANCE TO HILLSIDE CEMETERY, TORRINGTON, CONN.

NEW ENGLAND CEMETERY ASSOCIATION MEETS

The New England Cemetery Association held its annual meeting and banquet at the Quincy House, in Boston, February 13.

The meeting convened at four o'clock for the transaction of business and election of officers. The new officers are:

President, Wm. M. Carr, Supt. Forest Dale Cemetery, Malden, Mass.

Vice-president, H. W. Ross, Supt. Newton Cemetery, Newton, Mass.

Secretary-Treasurer, Horace A. Derry, Glenwood Cemetery, Everett, Mass.

The annual dinner, which followed, was attended by 32 members, with Pres. Carr presiding. There were no formal addresses, but various members spoke informally.

Previous to the meeting 23 members living in Greater Boston attended the funeral at Providence, R. I., of Timothy McCarthy, superintendent of Swan Point Cemetery, one of the charter members of the association.

ANOTHER FINE CEMETERY LANDSCAPE BOOK

We have frequently pointed out in these pages the advantages of fine landscape pictures in promoting the progress of the modern lawn cemetery and in educating the lot owners and the public on modern features of cemetery management. There is no more impressive way of teaching the value and the beauty of the modern park plan cemetery than by the publishing of handsome landscape pictures taken on the grounds. The fine illustrated books issued by Woodlawn Cemetery, New York, Forest Lawn, Omaha, Neb., Graceland, Chicago, and other modern cemeteries have been noticed in these pages.

The latest of these fine books, is the one just issued to chronicle a ten-year report of Alleghany Cemetery, Pittsburgh. It is in every way worthy of the best that has appeared in the way of cemetery literature and contains much valuable descriptive and historical matter. In typography and illustrations it is to be classed as a de luxe specimen of printed matter. Superintendent William Falconer has laid himself out on every feature of the book in the same thorough manner in which he lays himself out at

all times on the care of the grounds. The pages are nine by twelve inches in size, and the chief illustrated features are some thirty-eight full page half-tones, engraved in the highest quality and taken with an artistic eye to the landscape pictures that have been developed in the grounds. One of the pictures shown on our cover is a typical landscape view in "The Ravine," one of the choicest landscape sections of the cemetery. The other view shown on the opposite page is the family lot and monument of the late Charles E. Speer, a former president of the board. This is a good illustration of the fine art of setting off monuments by appropriate planting, and like many of the other illustrations is an example of the success with which this cemetery plans to give every prominent monument and lot an appropriate framework or setting of vegetation. Mr. Falconer is firm in the belief that a bare monument in the cemetery is as repugnant as a treeless pretentious mansion on a naked prairie. Hardy trees and shrubs where such can be used advantageously and without detriment to neighboring lots, are freely planted

in this framework, and as auxiliaries or to add richness to the effect, palms or other tropical subjects are extensively used in summer. The manner in which the tall monuments shown in this picture and the trees that back them been so grouped as to assist the work of blending the monuments in the landscape is especially notable.

It is the purpose of this ten-year review to show the lot owners and the citizens of Pittsburgh that the cemetery has kept pace in progress with every advanced idea in cemetery management that has been developed in the country. Every corner of the grounds is maintained with spotless cleanliness and order. In the thrift of its thousands of young trees and happy shrubs; the smooth, richness of the lawns; in the beauty and comeliness of the lot adornments, Allegheny Cemetery is a real oasis of vegetation in the Iron City. The varied and beautiful landscape pictures in this book may well be a pride to Pittsburgh.

We shall show in future numbers others of these pictures and tell more of the interesting features set forthin the book.

ORIGINAL FORM OF CLASSIC MAUSOLEUM

One of the most elaborate and beautiful of the many fine mausoleums in Woodlawn Cemetery, New York City, is the Robert Graves Memorial chapel recently erected by Robert Graves as a memorial to his wife.

The structure is a pleasing departure from the prevailing type of design, and the construction, the cemetery authorities say, establishes a precedent for future mortuary chapels.

The general form and architectural style of the structure was suggested by a building of Greek antiquity known as the "Tower of the Winds."

In plan, the chapel is octagonal and twenty-eight feet in height. From a simple base of three projecting stays the walls rise vertically to a height of twenty-two feet. Monolithic pilasters at each eorner and the mouldings of the window trims furnish the only break to the simplicity of the walls. Crowning the structure is a pyramidal roof, surmounted by a carved finial, which provides, by numerous apertures, a system of ventilation. Completing the exterior finish are double doors of open panelled design and classic window grilles, all of heavy bronze.

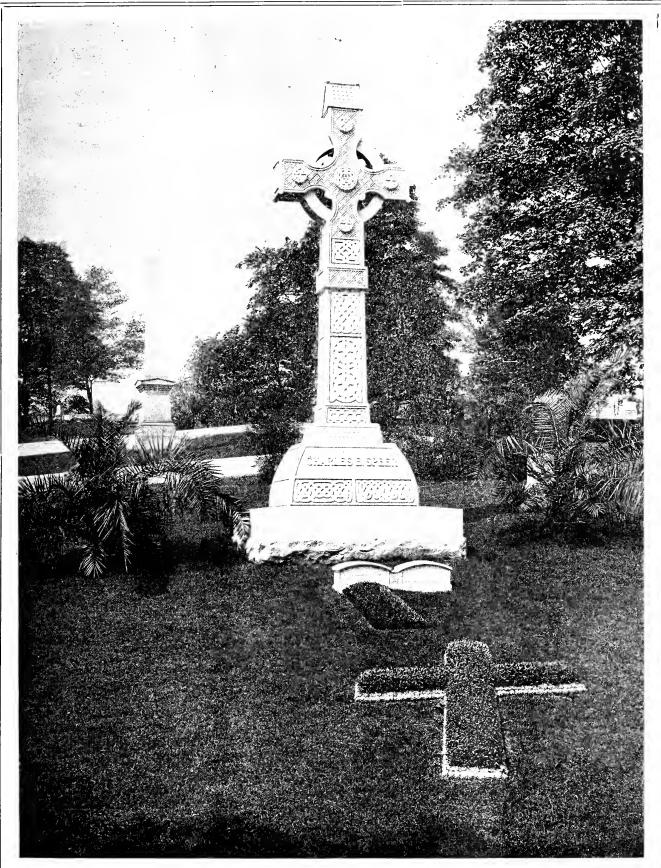
In the center of the white marble floor, bordered with Greek designs in soft-colored mosaic, stands an altar tomb containing receptacles for two interments. This tomb is also of pure white marble, simple in design and unornamented, save by a border of bronze olive leaves. The enveloping wall and roof stones are cut to fine surfaces on the inside.

The chapel is lighted by seven windows of Favrile glass, designed by Louis C. Tiffany. The eentral window, which contains "The Eternal City Among the Clouds," is in the east, opposite the entrance of the chapel. Gorgeous colors, in the center of which floats a white cross, mingle with the radiance of the "Heavenly City," and east a weird glow of blue, purple and golden tints.

The exterior of the structure is of light Barre granite. The general designs were suggested by Mr. Graves and the Leland Company of New York were the contractors.



GRAVES MEMORIAL TEMPLE, NEW YORK CITY.



LANDSCAPE PICTURE FROM ALLEGHENY ČEMETERY BOOK.

Showing the landscape art of setting off tall monuments with appropriate planting.

CURIOUS CHINESE CEMETERIES IN AMERICA

The burial customs of a people are largely the result of religious belief. The ancient Romans practiced cremation and the early Christians changed this to earth burial on account of the belief in the resurrection of the body. It is part of the belief of the followers of Confucius that the body must be buried in their native land. So it is that the Chinese in America provide for burial here for only a few years, the bones eventually being taken back to sacred ground. The largest Chinese cometeries of the Pacific coast are at Vancouver, San Francisco, Seattle and Portland. The bodies are left after burial from four to fourteen years, after which the bones are exhumed, placed in a tin box about two feet long and transported to China for final interment. There is no stated time for this exhumation, but it is generally done about once a year.

The accompanying photograph was recently taken in the Chinese cemetery at Portland. Ore., by Howard Evarts Weed, to whom we are indebted for its use. In this cemetery there are now about one hundred burials per year. Formerly there were nearly a thousand, but the restriction laws are such that there is now much less of a Chinese population on the Pacific coast than formerly. A charge



CHINESE CEMETERY, PORTLAND, ORE.

of ten dollars is made for the use of the grave for each burial, the same ground being used over and over again.

A WELL-PLANNED CEMETERY GREENHOUSE PLANT



GREENHOUSES AND SERVICE BUILDING, OAKLAND CEMETERY, ST. PAUL.

The new greenhouses recently completed at Oakland Cemetery, St. Paul, have been planned and built with more than usual care and with special attention to cemetery requirements. In both layout and equipment no pains have been spared to make them complete and efficient.

The general dimensions are about 98x176, covering an area of about 16,700 square feet. Of this, about 14,100 square feet are under glass; the remainder is occupied by the service building, containing boiler room, coal bunkers and dormant cellar in the basement. The office, closets, pot and soil rooms are on the first floor, and a general storage room in the loft. The service building is of ample capacity to serve twice the amount of glass now constructed.

The area of benches is about 8,250 square feet, besides about 800 square feet without benches for palms, dracenas, etc.

The glass house is so planned that additions, 30x175 feet, may be made

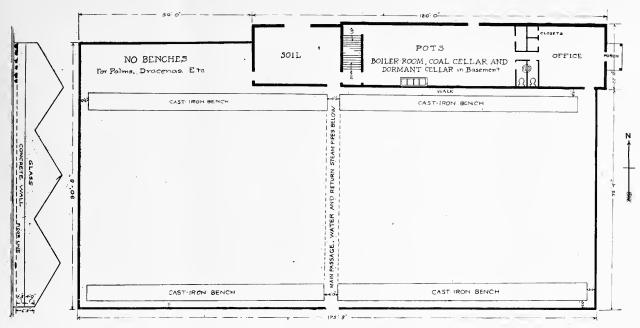
at any time. The glass house contains 12 cast iron stages and 6 concrete benches. A central passage, 4 feet wide, leads from the service building, and walks 2 feet 6 inches lead from this passage each way between the benches. The benches are from 5 to 6 feet wide. They are so placed that the shadows from the gutters fall in the walks. The glass house is of the best iron frame construction on 8-inch concrete walls.

The service building has stone basement walls and reinforced concrete floor. The walls are of interlocking tile, 4x4x17 inches, with 4-inch headers, alike inside and outside. The cost of the structure, fully equipped, is about \$29,000.

The basement and glass house walls were built by the cemetery association; the service building by Charles Skooglun, of St. Paul; the glass house and heating apparatus by Lord & Burnham Co., of Irvington, N. Y.;



NEW GREENHOUSES, OAKLAND CEMETERY, ST. PAUL.



PLAN OF OAKLAND CEMETERY GREENHOUSES.

the basic plans were drawn by Superintendent Frank D. Willis and the architectural features and detail

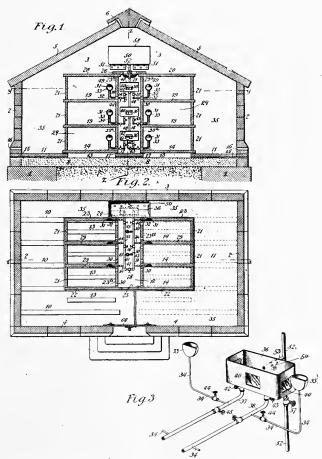
drawings were furnished by the Lord & Burnham Co. The house is now in service and the men who do the

work are satisfied that it meets the cemetery's requirements in every respect.

PATENTED SYSTEM OF MAUSOLEUM CONSTRUCTION

The mausoleum construction recently patented by Thomas J. Moore, of New York City, has for its particular objects improved ventilation, and the disinfection of the gases produced by decomposition. To each of the catacombs, as well as to the air space between, is supplied a disinfectant vapor with means for regulating the supply of the disinfectant. The floor slabs of the mausoleum are laid upon ribs formed on the foundation, while the bottom slabs of the catacombs rest upon intermediate and slightly raised ribs on the foundation, thus raising the floor and bottom slabs of the catacombs above the surface of the foundation, leaving air spaces beneath both the floor and bottom of the catacombs which communicate with an air space between the catacombs. This space may be provided at the top with a cover having openings which allow the air to escape and to communicate with the outside air through openings in the roof. There are air openings in the walls of the structure both below and above the floor slabs, thus providing for a complete circulation of the air within the mausoleum.

In the accompanying drawings, Fig. 1 is a vertical section upon the dotted lines x, x, of Fig. 2. Fig. 2 is a plan view partially in section upon the dotted lines y, y, of Fig. 1, and Fig. 3 is a broken perspective view in enlarged size of one of the tanks and its connections for holding and supplying the disinfectant. The catacombs are arranged centrally within the mausoleum leaving a passageway or aisle 35 on all sides between them and the walls of the mausoleum. A door 25 is provided in the front slabs 22 to give access to this air space. This air space 18 may be entirely open at the top, or have a cover 26, as shown. At or near the bottom of each back slab 23a are air openings 30 which provide for a circulation of air within the catacombs, such openings communicating with the air space 18.



MOORE PATENTED MAUSOLEUM CONSTRUCTION.

CEMETERY NOTES

Citizens of Glade Park, one of the newest towns in the Big Park country of Colorado, suddenly found it necessary to hold a mass meeting, select a site and start a cemetery before a three-months-old baby could be buried at Glade Park. A cemetery association was at once organized, which purchased a site and prepared to plat it. The child was the first born in Glade Park.

The claim is made that Woodland Cemetery, Cleveland, O., is the most heavily occupied, in point of bodies buried to the acre, of any in the world. It contains 60 acres, with a record of 59,000 burials.

The Lake View Cemetery Association, Jamestown, N. Y., has recently purchased an adjoining property of 98 acres. The cemetery now owns close upon 200 acres, and the last purchase is admirably adapted to landscape embellishment.

Suit was begun in the superior court, San Rafael, Calif., on February 9 by Mr. E. Blois du Bois against the Mount Tamalpias Cemetery Company for \$87,711.62, principal and interest, which he alleges is due him on promissory notes executed by the company. Mr. Du Bois also placed an attachment on the equipment of the company.

Residents of Sears, Ia., have petitioned the board of supervisors to investigate conditions in the paupers' Cemetery, which appear to be in bad shape. The residents want the cemetery removed.

The Norfolk, Va., board of aldermen last month concurred with the common council in the appropriation of \$17,510.54 for the purchase of Calvary Cemetery, Inc., over the veto of Mayor Riddicks. This is the colored cemetery.

The house bill prohibiting the location of a cemetery within a half mile of the state university or soldiers' home was finally passed by the Minnesota Senate on January 27.

The trustees of St. Patrick's Cathedral, Manhattan, propose to have a large cemetery laid out at Central Park, Mineola, L. I. With this object in view notice was given in the county papers that the trustees would apply to the board of supervisors of Nassau County for permission to take and set apart a large tract of land for cemetery purposes. Some 241 acres have been secured. A petition has been filed with the supervisors reciting the fact that

this land has been obtained, with the statement that on that date given in the notice the trustees would appear before the board and request permission to establish a cemetery there.

In the illustrated article on Spring-dale Cemetery, Peoria, Ill., in the February issue, the paragraph in which the area of the cemetery is given should properly read: the acreage is approximately 250 of which 47 acres have recently been purchased, and which will be added to the original area as required.

Conditions in the so-called paupers' cemetery in South Rock Island, Ill., has led to petitions from an increasing population to the county board asking that the cemetery be discontinued as a burying ground. Disclosures made in the local press as to shallow graves and improper methods forced this issue.

In order to meet Indian superstitions the government is making an effort to have a small tract of land located on Warner's ranch in California given back to the Indians. The ground was used as a burying ground by the Pala Indians. The land was taken from them by a court decision, it is declared and in a petition to the Indian bureau the Indians aver that when the land was taken away they were promised they could retain that section which held their dead. The Indian office has made requests of those who have interests in the ranch to restore the burial ground to the Indians.

Community mausoleums are talked of for Columbia City, Ind.; Bucyrus, O.; Wapakoneta, O.; Cincinnati, O. A concern called the Eastern Mausoleum Co., \$10,000,000 capital stock, is reported to have been organized at Portland, Me., to manufacture and erect monuments and mausoleums and furnish cemetery supplies.

It is interesting to note what "taking hold of things" can accomplish in the case of small cemeteries. The Hanover Cemetery, Hanover, Kas., of eight acres a few years ago was a wilderness, the directors not having held a meeting for many years. Seven years ago A. R. Mengers, was elected secretary, together with a few directors, all inspired with a determination to mend things, and this has been done. The grounds have been greatly improved, roads made and other necessary things done. The association

is laboring under the disadvantage of a clause in its constitution which sets aside three acres of the eight for the public; in other words, these three acres cannot be sold. Mr. Mengers would like to hear from any of our readers who have such a stumbling block to contend with, and to learn if the clause can be changed.

Matters have been arranged between the commissioners of Mount Hope cemetery, Worcester, Mass., and the Massachusetts civil service commission, so that the commissioners may hire their laborers for grave digging and general cemetery work, and register their names with a statement of the pay they are to receive, at the Worcester office of the civil service commission, within 10 days of the time they are hired.

The judiciary committee, at Sacramento, Calif., has passed favorably upon Senator Cassidy's bill providing for the repeal of the law concerning the disinterment of bodies. The measure was opposed by George D. Gray, one of the trustees of the Laurel Hill Cemetery Association, San Francisco. This decides the point that sentiment shall not stand in the way of the growth of the city, and streets will now probably be cut through or carried under Laurel Hill Cemetery.

NEW CEMETERIES

The city council of Seattle, Wash., has appointed a committee of five to act with the board of park commissioners in obtaining 100 acres to be used by the city as a cemetery in exchange for Jefferson park, which lies adjacent to the Beacon hill reservoir.

St. Mary's Catholic congregation at Eden. Fond du Lac, Wis., is about to establish a new cemetery which will be operated in conjunction with the church. At a recent meeting the organization of a cemetery association was perfected and the details of the purchase of 4 acres of land was completed. Although the congregation has been established some 15 years, it has never had a burying ground of its own.

The Green River Cemetery Co., Greenfield, Mass., has purchased an adjoining tract of land to provide for future needs. It contains 10½ acres.

The city council of Bloomington, Ill., are examining options and investigating sites with a view to establishing a new city cemetery.

Wilmington, Delaware, is considering the question of purchasing Mt. Zion Cemetery, an adjoining cemetery and the tract of an adjoining property owner, at a price of \$67,000.

CEMETERY IMPROVEMENTS

There is a movement in Fresno, Calif., looking to an arrangement by which the city shall take charge of the cemetery. The main plea was that the city having better facilities for supplying and distributing water, could administer such a matter together with the care and improvement of the grounds to better advantage.

The accompanying illustration shows the layout of the new portion of Mountain View Cemetery, Longmont, Colo. The association is a private corporation, established in 1876 and is governed by a board of trustees. The total interments amount to 1587. All lots are sold under perpetual care, and the fund is now \$2,100. There are some 1,200 trees on the ground, and the topography of the plot is a gradual slope from center in all directions. Sunday funerals are permitted and there are no restrictions as to monuments. The water supply is city water, with irrigation water from a ditch. There is a stand-pipe and tile is laid throughout the cemetery. In the near future it is expected that a chapel will be built, together with two shelter houses and an entrance gate, and the whole area is to be enclosed by an iron fence.

Following the refusal of the city to lend aid to the Hollywood Cemetery Memorial Association, Jackson, Tenn., in its efforts to beautify that cemetery, the association has dedecided to try to do the work unaided. The cemetery which is the only one in the city where the general public may secure lots, is owned by a private corporation, and the company will not aid the association in its efforts to improve the appearance of the place.

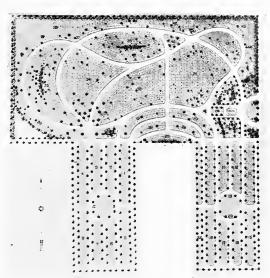
All legal title to Lone Fir Cemetery, Portland, Ore., is now vested in the Lone Fir Lot Owners' Association, the Lone Fir Cemetery Company having turned over all the stock to the lot owners. The Lot Owners' Association adopted a constitution and elected Dr. S. E. Josephi president; J. A. Strowbridge, secretary and treasurer, and M. V. Harrison, the third director. It has made an assessment of \$50 a lot of 10x20 feet and \$10 for single graves in the cemetery to raise money to defray the cost of improvements. The beautifying of the cemetery has begun under the direction of Howard Evarts Weed, landscape architect.

At the annual meeting of the Evergreen Cemetery, Rutland, Vt., satisfactory progress was reported. The new chapel and office, for which subscriptions amounting to some \$2,-000 were collected, are practically completed. Considerable improvemen was made during the year.

A. W. Priest, the paper manufacturer, who recently gave a \$6,000 soldiers' monument to the G. A. R. of Appleton, Wis., has presented the Riverside Cemetery Association with an order for a \$3,600 concrete bridge across the ravine in the cemetery.

The office building and superintendent's residence, which have been recently completed at Wyuka cemetery, Lincoln, Neb., at a cost of nearly \$21,000, were opened for public inspection last month. A great many improvements have been made in this cemetery during the past few years. It is estimated that the total value of the buildings in the cemetery amounts to \$67,000.

The Swedish cemetery association, Rockford, 111., has decided to plat a five-acre addition to the cemetery.



PLAN FOR LONGMONT, COLO., CEMETERY. White part in center and blank at left are private property.

The cemetery commissioners of Wakefield, Mass., have asked for an appropriation of \$600 for the erection of a waiting room, ladies lavatory, and other improvements.

St. Francis's cemetery, Naupatuck, Conn., which has fallen into a dilapidated condition of late years, is to be improved and put into good condition at once so the Rev. Thomas Cooney, the pastor of the church has determined.

The cemetery trustees of Locust Hill cemetery, Evansville, Ind., have been planning for extensive improvements including the installment of a sunken garden. As now planned, the garden will be between eight and twelve feet below the surface of the ground. The bottom of the garden will be reached by a series of terraces decorated with planting.

The Independence, Mo., city cemetery, burying in which began more than eighty years ago, is being improved. Nearly two hundred gravestones that had fallen down or were leaving badly have been reset.

Finding that an improved cemetery is a good advertisement, the Paradise Cemetery Association, Paradise, Butte Co., Calif., has been busy in that kind of work lately. A competent gardener has also been engaged. Many non-residents have secured lots by reason of the attractive grounds.

FROM ANNUAL REPORTS

The annual report of the cemetery of Mount Auburn, Boston, Mass., being that for its 79th year, records that the proceeds from the sale of lots for the year added to the Perpetual Care Fund brings the amount

up to \$1,688,365.37. The Permanent Fund is \$559,-715.81, having gained \$14,-125.48 during the year. The General Fund is now \$238,-033.80. The cemetery is still fighting the ravages of the brown-tail moth and similar pests and has kept them under control. The total receipts for the year: From sales of lots, \$10,-906.60; labor and materials on lots, \$73,076.78, and other sundries amounted to \$86,-240.63, the receipts from all sources being \$178,914.11. Among the expenditures were \$70,268.39 for pay roll. repairs, material and sundries; and for salaries, taxes and general expenses, \$20,842.42. The report is illustrated with half-tones

and it contains also forms of deeds, reputations, etc.

The annual report of Woodlawn Cemetery, Everett, Mass., shows receipts from sales of lots, \$25,824.35, and from interments, foundations and care of lots, \$25,117.89. Among the expenditures were: Salaries, labor, supplies, rents, etc., \$35,057.96; care of lots \$10,506.65. The Repair Fund now amounts to \$273,560.50. The new chapel, of which a half-tone cut is given, is completed and will be dedicated this spring.

The annual report of the Pittsfield, Mass., Cemetery, shows total receipts of \$12,579.65 and expenditures, \$12,377.17 and, although the year was an expensive one for maintenance, there

was a slight gain in assets. The principal receipts were: Sale of lots, \$3,-871.60; interments, \$1,955.75; care of lots, etc., \$3,317.25. The Perpetual Care Fund now amounts to \$66,017.25, which provides for 548 lots out of a total of 2,500. The cemetery has now a total of 8,431 interments, and has an area of 150 acres.

The treasurer's report of Swan Point Cemetery, Providence, R. I., shows receipts for the past year of \$193,649.37 and disbursements, \$186,-669.65. The total assets of the corporation are \$489,935.80; the permanent fund is \$129,674.55, and the perpetual care fund has reached a total of \$444,488.82, an increase of \$15,834 for the past year. The upkeep of the grounds and the care of the cemetery has been carefully maintained. Last spring the Rhode Island Chapter of the American Institute of Architects erected a rustic stone seat on the main avenue from the entrance, which has been surrounded with shrubbery and trees and forms a fitting and beautiful tribute to the late president of the cemetery, Mr. Alfred Stone. The failure to secure favorable action by the city on the petition to abandon the Swan Point road, running through the grounds was a great disappointment to the managers.

Daniel C. Thurber, for the past 11 years assistant superintendent at Swan Point Cemetery, has been promoted to be superintendent to fill the vacancy caused by the death of Timothy McCarthy. The new superintendent has been in the employ of the corporation about 30 years. During the last 11 years of that time he was assistant under the late superintendent. He is thoroughly conversant with the general ideas formulated by Mr. McCarthy regarding the laying out of the grounds, and the future development, and is considered amply qualified to continue that work.

OBITUARY

Mr. Timothy McCarthy, for thirty-five years superintendent of Swan Point Cemetery, Providence, R. I., died Feb. 10, after an illness of several weeks, at his home within the grounds he loved as his own. His funeral, attended by the city's wealthiest and most representative, as well as poorer citizens, took place from the Church of the Holy Name, where the final prayers were recited by Rt. Rev. Bishop Harkins, D. D., attended by Vicar General Doran, LL. D. The interment was in the family lot at Swan Point.

Both the A. A. C. S. and the N.

E. C. S. associations were represented at the funeral, the honorary bearers from the A. A. C. S. being Messrs. Brazill, Cunningham, Driscoll, McMahon, Salway, O'Connor, Cline and Reid; from the N. E. Association: Messrs. Creesy, Derry, Floyd, Hargraves, Rafferty, Ross, Scorgie and Warren. The Catholic Club, of which the deceased was a member, was represented by ex-Gov. Higgins, ex-



THE LATE TIMOTHY McCARTHY.

Mayors Fitzgerald and McCarthy, Col. McGann, and Drs. Gleason and McGuirk. The offices of "North Burial Ground" and "Catholic Cemeteries" were closed during the services by Supt. James Warren, Jr., and Rev. J. P. Harrington, out of respect to the memory of their associate.

With the passing of Mr. McCarthy, the A. A. C. S. loses one of its most zealous promoters; every member, a personal friend; and Swan Point its peerless chief. For more than a third of a century he had labored to make his the most perfect cemetery, from a landscape point of view, in the country. Original in methods and ideas, and success attending the application of both to his life work, his transformations and triumphs were complete-and both names "McCarthy" and "Swan Point" became synonymous as well as famous through out the land. Keenly alert to all that might enhance their artistic beauty, he accentuated rather than conventionalized the natural features of the grounds under his care, and his masterpiece with the boulder wall—the finishing touch of the artist. The members of the A. A. C. S. who visited Swan Point during the Providence convention in

1907, recall with exquisite delight the lasting impression made upon them by the rough, massive enclosure, with its every nook and cranny reflecting the skilled handiwork of the genius who made such a combination pos-With pleasure equally keen, they remember also, the warm-hearted hospitality of the reception. They, as well as the legions who have visited both Mr. McCarthy and Swan Point, marvelled at the large humanity of the deceased, his wit so free from smallness, and the gracious gentler touches of his nature concealing stalwart strength of character beneath.

Single minded in work, in his social and domestic life, there was never the suspicion of the dual personality about him. Scorning those "miserable aims which end with self," his influence was leavening, his humor delightful and refined, his jovial spirit serious in the causes which brought it to the surface, and thereby the number of his friends never grew less. These he has left behind, lonely at his absence, and sympathizing sincerely with his widow and family.

"'And so goodby!' Light words, and quickly said!

But could they reach your ears, beloved dead,

Their burden you would guess
Better than many wearing graver
face.

Goodby to genius, gentleness and grace!

A vanished presence and a vacant place Leave us in heaviness."

Mr. Levant L. Mason, a well known and much respected citizen and business man of Jamestown, N. Y., and for two years past president of Lake View Centetery Association of that town, passed away on February 13, in his-85th year. For 25 years he had also been secretary and superintendent of the cemetery. He died in the house in which he began housekeeping when he was married over 60 years ago. The town loses one of its best known citizens, a man equal to any trust reposed in him. No short obituary notice can cover the life lived by Mr. Mason, for he was never toobusy to give any help or work for the public welfare and the good of others, and he was most assuredly a part of the life of the community in which he lived. He was born near Buffalo in 1826 and came to Jamestown when a child. He leaves a son and daughter with their children and the children of a deceased daughter. He was buried in the cemetery which he had served so long and faithfully.



ROAD IN FOREST LAWN CEMETERY, OMAHA, NEB., BUILT WITH TARVIA X

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We illustrate above one of the smooth, dustless, durable, tarviated roads in Forest Lawn Cemetery. Regarding these roads, Mr. James Y. Craig, the Superintendent, writes as follows:

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Omaha, Neb., April 5, 1910.

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TOPICAL INDEX to OUTDOOR LITERATURE

An Index to articles on Gardening, Forestry, Park, Cemetery and Civic Improvement and kindred subjects in leading general and special magazines

Subscriptions will be received for any magazine or periodical at club rates with Park and Cemetery. Publications in which articles appear are listed below, and referred to by abbreviations, thus: S. L. 8 67.8, Feb. 0.9, means: Suburban Life, vol. 8, pages 67.8, February, 1909, Single copies should be ordered direct from the publications at addresses given below.

PUBLICATIONS INDEXED AND ABBREVIATIONS USED.

American Botanist, Joliet, Ill. (A. B.), 75c year: 20c copy.
American City, The, (Am. C.), New
York, \$1.00 year: 10c copy.
American Florist, Chicago (A. F.), \$1.00

American Florist, Chicago (A. F.), \$1.00 year; 5c copy.

American Homes and Gardens, New York (A. H. G.), \$3.00 year; 25c copy.

Architectural Record, New York (Arch. Rec.), \$3.00 year; 25c copy.

Art and Progress (A. & P.), Washington, D. C.; \$1.50 yr.; single copy 15c.

Beautiful Homes (B. H.), St. Louis.
\$1.00 year; 10c copy.

Canadian Florist, The, Peterboro, Ont., Can. (C. F.). \$1.00 year; 10c copy.

Canadian Municipai Journal, Montreal (C. M. J.), \$1.00 year; 10c copy.

City Hall, The. Des Moines, Ia. (C. H.), \$2.00 year; 20c copy.

Conservation, Washington, D. C. (Cons.).
\$1.00 year; 10c copy.

Country Life in America, New York City (C. L. A.), \$3.00 year; single copy.

City (C. L. A.), \$3.00 year; Single Cop., 25c.
Country Gentleman, Albany, N. Y. (C. G.), \$1.50 year; 20c copy.
Century Magazine. New York City (Cent.), \$3.00 year; 35c copy.
Survey, The, New York City (Sur.), \$2.00 year; 10c copy.
Chautauquan, The, Chautauqua, N. Y. (Chaut.), \$2.00 year; 25c copy.
Craftsman, The, New York City (Cr.), \$3.00 year; 25c copy.
Embalmers' Monthly, Chicago (E. M.), \$1.00 year; 10c copy.
Fern Bulletin, Joliet, Ill. (F. B.), 75c

Embalmers' Monthly, Chicago (E. M.), \$1.00 year; 10c copy.
Fern Bulletin, Joliet, Ill. (F. B.), 75c year; 20c copy.
Florists' Exchange, New York City (F. E.), \$1.00 year; single copy, 5c.
Florists' Review, Chicago (F. R.), \$1.00

Florists' Review, Chicago (F. K.), \$1.00 year; 5c copy.
Forest Leaves, Philadelphia, Pa. (For. L.), \$1.00 year; single copy, 10c.
Fruit Grower (F. G.), St. Joseph, Mo., \$1.00 a year; 10c copy.
Gardener's Chronicle of America, Jersey

D ABBREVIATIONS USED.

City, N. J. (G. C. A.), \$1.00 year; single copy, 10c.

Garden Magazine, New York City (G. M.), \$1.00 year; single copy, 15c.

Gardening, Chicago (Gard.), \$2.00 year; single copy, 10c.

Gartenkunst, die, Frankfurt, Germany (German), G. K., \$4.00 year; 50c copy.

Good Roads Magazine, New York (G. R. M.), \$1.00 year; single copy. 10c.

Horticulture, Boston (Hort.), \$1.00 year; single copy 5c.

House Beautiful (H. B.), Chicago; \$3.00

single copy 5c.
House Beautiful (H. B.), Chicago; \$3.00 year; 25c copy.
House and Garden, Philadelphia (H. G.),

House and Garden, Philadelphia (H. G.), \$5.00 year; 50c copy. Independent, The, New York (Ind.), \$3.00 year; 25c copy.

Landscape Architecture (L. A.), Harrisburg, Pa.; \$2.00 year; 50c copy.

Meehan's Garden Bulletin, Germantown, Philadelphia (M. G. B.) 50c year; 5c copy.

Minnesota Horticulturist, Minneapolis (M. H.), \$1.00 year; single copy, 10c.

Minnesota Horticulturist, Minneapolis (M. H.), \$1.00 year; single copy, 10c.
Moeller's Deutsche Gaertner-Zeitung, Erfurt, Germany, (German), M. D. G., \$3.00 year; 10c copy.
Municipal Engineering, Indianapolis, Ind. (M. E.), \$3.00 year; single copy, 25c.
Municipal Journal and Engineer, New York (M. J. E.), \$3.00 year; single copy, 25c.

Monumentai News, Chicago (M. N.), \$1.00 year; single copy, 10c. National Nurseryman, Rochester, N. Y. (N. N.), \$1.00 year; single copy, 10c. Pacific Municipalities, San Francisco (P.

Revue Horticoie, Paris (Rev. Hort.), French, \$4.50 year; 50c copy.
Scientific American, New York (Sci. Am.), \$3.00 year; 10c copy.
Suburban Life, New York (S. L.), \$3.00

Suburban Life, New York (Sur.), \$2.00 year; Survey, New York (Sur.), \$2.00 year; 10c copy.
Woodland and Roadside, Boston (W. R.), 50c year; single copy, 10c.

Civic Improvements, Home Grounds

A Small City's Plans for Growth, H. J. Hooker. Illust. Am. C., 4:51-5. Feb., '11.

Essential Features in City Building, H. M. Weir. Am. C., 4:72-3. Feb.,

Flower Preservation. Illust. A. H. G., 8:63-4. Feb., '11.

Flowers for Hall and Porch Decoration. Illust. C. L. A., 19:294. Feb. 1, '11.

Fountains, Italian, by E. LeBlond. Illust. H. B., 29:41-2. Jan., '11.

of Sensibility Iconoclast Again (Billboards), by M. Selby. Cent., 81:638-40. Feb., '11.

London Town Planning Conference, J. Ihlder. Illust. Review of Reviews, New York, 43:46-8. Jan., '11.

New Ideas and the City, J. H. Holmes. Sur., 25:499-501. Dec. 24,

Newburg's Model School Building, M. V. Fuller. Illust. Am. C., 4:61-3. Feb., '11.

Plan of Grounds for a Small Bunga-

low. Illust. A. H. G., 8:76-7. Feb.,

Streets from the Landscape Point of View, A. T. Erwin. Am. C., 4:76-7. Feb., '11.

The Need of a City Plan Commission, H. A. Barker. Am. C., 4:64-5. Feb., '11.

Ten Years' Growth in Population, E. D. Dunrand. Map; World's Work, New York, 21:13838-42. Jan., '11.

Washington, the Capital of the People, T. N. Page. Illust. A. & P., 2:127-33. Mar., '11.

Gardens and Landscape Gardening

A Rose Garden that Gave Results, Josiah D. Whitney. Illust. G. M., 13:80-1. Mar., '11.

Clover Crops: Fertilizers as Well as Preservers of Existing Fertility, H. B. Fullerton. Cr., 19:498-501. Feb., '11.

Dollars and Cents in Landscape Gardening, L. Underwood. Illust. S. L., 12:159. Mar., '11.

Indoor Garden of Moss and Fern, by S. L. Bastin. Illust. A. H. G., 8:62-3. Feb., '11.

Gardening for and by the Amateur, J. O. Thilow. F. E., 31:198. Feb. 4, '11.

Garden Art and Care of Memorials (Concluded), Dr. Gradman. Illust. (German.) G. K., 13:28-33. Feb.,

How a Pergola Redeemed a Backyard, Mrs. J. W. Dreyer. Illust. G. M., 13:82. Mar., '11.

Successful Flower Planting Table. S. L., 12:160-1. Mar., '11.

Start your Garden with the Year, H. S. Adams. Illust. C. L. A., 19:229. Jan. 1, '11.

Successful American Gardens. Miller. Illust. C. L. A., 17:679-82; 18:45-8: 651-6; 19:214-8. Apr., May, Oct., '10; Jan. 1, '11.

The Right Way to Plan Walks, Lawns and Beds, W. S. Rogers. Illust. G. M., 13:84-5. Mar., '11.

Parks, Cemeteries and Public Grounds

Automobile Road Making, New Successful Experiments in, by L. W. Page. Illust. C. L. A., 19, sup. 276. Feb. 1, '11.

Dustless Roads of California, A. B. Fletcher. G. R. M., 12:58-60. Feb.,

English Apparatus for Testing Bituminous Road Materials. Illust. G. R. M., 12:79. Feb., '11.

Gönner Park in Baden-Baden, M. Laüger. Illust. (German.) G. K., 13:25-8. Feb., '11.

Lake Front Drive in Wisconsin. Illust. G. R. M., 12:65-6. Feb., '11. Parks as a Commercial Asset. Outlook, New York. 96:806-7. Dec. 10. '10.

Patrol System of Road Maintenance Adopted by Allegheny County, Pa., M. O. Eldredge. Illust. G. R. M., 12:49-52. Feb., 11.

Three-notch Roads. Harpers Weekly, New York, 54:31. Dec. 10, 10. The "Rocmac" Method of Road Construction. Illust. G. R. M., 12:76-7. Feb., '11.

Trees, Shrubs, Plants, etc.

Bulb Novelties of 1910, J. Jacobs. Hlust. F. E., 31:314-17. Feb. 18, '11.

Chestnut Tree, Doom of. Harper's Weekly, 55:15. Feb. 4, '11.

Cool Greenhouse, H. Ericksen. Illust. H. B., 29:39-41. Jan., '11.

English Plant Novelties, J. Harrison Dick. Illust. F. E., 31:318-20. Feb. 18, '11.

Exploring the Philippine Forest, C. A. Gilchrist. Illust. Collier's New York, 46:14. Dec. 17, '10.

Experimenting with Dahlias, Mrs. E. E. Trumball. Illust. S. L., 12:169.





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Mar., '11.

Fire Loss in National Forests. Cassier's Magazine, New York, 39:188-9. Dec., '10.

Foreign-born American Trees, M. Smith. Review of Reviews, New York, 43:72-9. Jan., '11.

Greenhouse Construction and Heating, John A. Payne. Illust. Feb. 25, '11.

How to Know Trees by their Bark. Illust. C. L. A., 19:268. Jan. 15,

Iowa Plant Breeder-Chas. G. Patten, L. H. Bailey. Illust. Century, 81: 392-401. Jan., '11.

Immunity in Plants. Scientific American, 103:454. Dec. 10, '10.

Introduction of Chinese Plants. Rev. Hort. (French), 83:57-8. Feb. 1, '11.

Making the Most of the Hardy Border, E. E. Rexford. Illust. S. L. 12.174. Mar., '11.

Our Annual Novelty Review. Illust. F. E., 31:305-13. Feb. 18, '11.

Public Work for Floriculture in Illinois. F. R., 27:11. Feb. 16, '11.

Protection from White Ants and Other Pests, W. A. Dixon. Nature, New York, 85:271. Dec. 29, '10.

Red Cedar, A. O. Huntington. C. L. A., 19:sup. 194. Jan. i, '11.

Springtime in Winter, S. L. Bastin. Illust. A. H. G., 8:38-9. Jan. 12,

Smallest of the Century Plants. Popular Science, New York, 78:5-15. Jan., '11.

Shipping Plants and Flowers, J. F. Amman. A. F., 36:201. Feb. 25, '11.

The Secret of Certain Annuals, H. S. Adams. Illust. G. M., 13:74-6. Mar., '11.

Useful Insect Parasites. Rev. Hort. (French), 82:58-60. Feb. 1, '11.

Unique Greenhouse Layout at M. C. D. Borden's, Oceanic, N. J. Illust. F. E., 31:382-3. Feb. 25, '11.

Wonderful Plants of California, P. D. Carnhart. Illust. F. E., 31:256-7. Feb. 11, '11.



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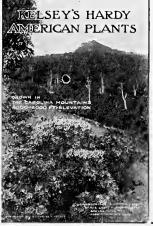
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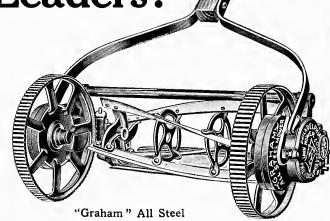


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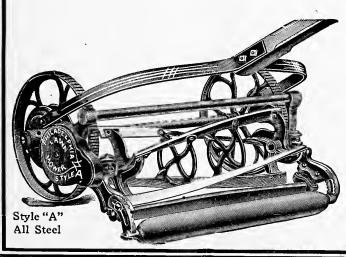


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REPORTS, ETC., RECEIVED

Mr. George C. Marion, president of The Ulysses Cemerery Association, Ulysses, Pa., has sent us blanks of the report form to the Court of Permanent and Endowment Funds, with the form of petition for investing the funds. They show also the safeguards for handling the investment of such funds as provided by the laws of Pennsylvania.

From Mr. J. C. Bennett, Emmets-burg Cemetery Association, there has been received a blank form of the Perpetual Care Fund Certificate now used by the cemetery. The blanks are use in triplicate—one for the lot owner, one for the court, and one bound in the cemetery record book. Mr. Bennett is taking up the question of securing a law giving cemetery associations the right to levy a small tax on burial lots to provide a fund to help in the up-keep of the grounds. He is distributing a circular letter to cemetery officials on the subject.

Holm & Olson, landscape architeets, nurserymen and florists, of St. Paul, have issued a beautifully illustrated booklet, "Landscape Development," that is one of the most ambitious pieces of commercial literature that has come from the field of horticulture. It is a well-written and carefully prepared guide to the planting and improvement of every class of grounds, including school, home, railroad station, park, cemetery, hospital, etc. It is accompanied by a handsomely illustrated catalog and folder on "Artistic Landscape Development"

From the U. S. Department of Agriculture: "The Ornamental Value of the Salt Bushes," Circular 69 of the Bureau of Plant Industry; "Insect Injuries to Forest Products," Circular 128 of the Bureau of Entomology; "Insect Injuries to the Wood of Dead and Dying Trees," Circular 127 of the Bureau of Entomology.

Missouri Botanical Garden: Seventeenth annual announcement concerning Garden Pupils, giving the terms and conditions of the garden scholarships awarded by this institution each year.

The Annual Report of the Massachusetts Civic League contains reports of the officers, and committees, including some interesting reports of committees on Playgrounds, Village Improvement, and Street Advertising in Boston.

PERSONAL

John R. Graham, a former foreman of Pine Grove Cemetery, Lynn, Mass., is the first appointee under the new form of government. He becomes as-

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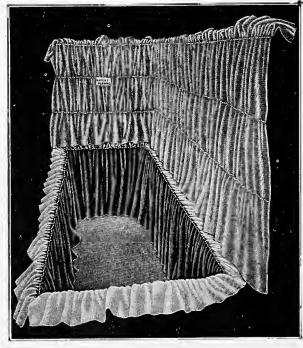
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More Easily, More Economically, If You Sow

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The Wizard Lawn Producer.

Kalaka is a twentieth century invention that enables you to have a beautiful lawn of green grass grown where all other seeds and fertilizers have failed. Hundreds have testified to its efficiency. You

Sow It Like Any Seed. Watch It Grow.

Kalaka is a mixture of choicest selected grass seed and a powerful concentrate of dried animal manure from which all chaff, weed seed and impurities are absolutely eliminated. The seed and fertilizer are mixed in scientific proportions, the mixture goes into the ground, the seed germinates with moisture and the grass comes up before you know it.

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5 lb. box express prepaid East of Missouri River on receipt of \$1.00 or West of the river for \$1.25. Special price on quantity lots. Write for our free booklet.

"How To Make a Lawn"

The Kalaka Company

829 Exchange Ave., Union Stockyards, Chicago Ill.

sistant commissioner of streets. It is expected that this will be the name of the office as soon as the new municipal council gets into full running order. Mr. Graham was born in Lynn, Oct. 27, 1864, and has held various city positions in the street and water departments.

For the 26th time Mr. Martin Packard was elected superintendent of Melrose Cemetery, Brockton, Mass., by the burial committee of the city government. He first assumed the duties of the position when the cemetery land was bought in the spring of 1885; at that time there was a small cemetery, owned by a private corporation, located in the center of what is now Melrose Cemetery, which comprises 60 acres.

PUBLISHER'S NOTES

It is conceded by all who know anything about the treatment of land for even the coarser crops, that the roller is an essential requisite, and that good results follow its intelligent use, not only in smoothing the land but in promoting germination and growth. To follow this to the lawn is not a far step, and a lawn can be made as smooth and velvety, and free from tufts and hummocks by the free use of a lawn roller as one may desire. The Dunham Company, Berea, O., whose advertisement appears in another column, do an immense business in the manufacture of land rollers, pulverizers and packers for all purposes, and a study of their booklet on "The Proper Care of Lawns," will afford the reader some useful information on this subject. Write to them for copy.

Permanently marking lots and graves is always a supreme desire on the part of cemetery managers who aim to have things right. Cement, terra cotta, granite, marble, stone and galvanized iron are all used for this purpose and each material has its advocates. The Berger Manufacturing Co., manufacturers of galvanized cast iron grave marks, Cincinnati, O., report having received a large number of inquiries and some good sized orders for spring delivery. These orders are from customers that have bought galvanized markers in the past and evidently implies that they have given satisfaction.

The Witten automatic dump cart, advertised by the Baker Manufacturing Co. of Chicago, is the same device that was shown in the miniature model exhibited by Edward G. Carter at the Chattanooga convention of the A. A. C. S. and was commented upon so favorably. The cart has a number of ad-

Automatic Dump Cart

Just What You Have Been Looking For

A necessity for Farmers, Fruit Growers,
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Send today for free illustrated booklet telling all about this labor-saving cart.

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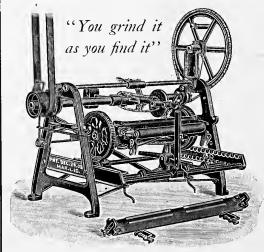
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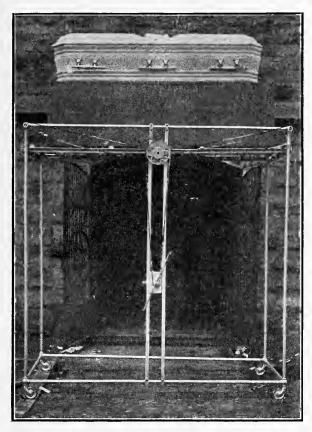
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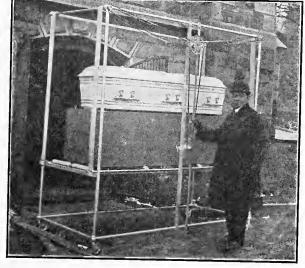
Heath Foundry & Mfg. Co.

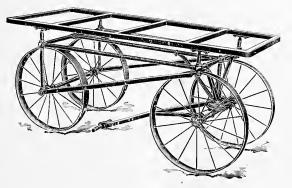
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vantages that commend its use at parks and cemeteries. A descriptive circular illustrating the mechanism will be mailed by the manufacturers on request.

TRADE PUBLICATIONS

Clark's Hardy Flowers, Spring, 1911; Daniel A. Clarke, Fiskville, R. I

"The Proper Care of Lawns," illustrated book of information and catalog of the Dunham Company's Rollers, Berea, O.

The Technical Educator, published in Rochester, N. Y., in its issue of January, 1911, contains a large number of fine illustrations of the horticultural products of the Ellwanger & Barry nurseries as illustrations of an extended account of why Rochester is known as the "Flower City."

Catalog of the Richland Nurseries. of Rochester, N. Y., for 1911.

"Novelties in Trees, Shrubs, Roses and Hardy Plants," booklet from Ellwanger & Barry, Rochester, listing novelties, many of which have not before been offered to the public.

Elm City Nursery Co., New Haven, Conn., 1911 catalog.

Ninety-six page illustrated catalog of lawn vases, chairs, etc., from Kramer Bros., Dayton, O

Implement Catalog of Peter Henderson & Co., New York.

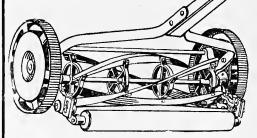


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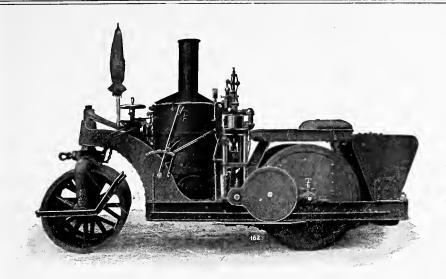
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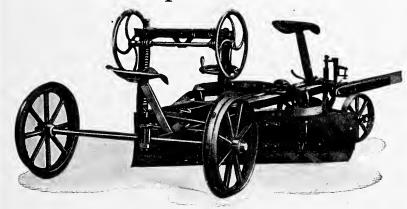
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Wholesale Catalog of D. Hill, evergreen specialist, Dundee, Ill.

Wholesale price list from the Waukegan Nurseries of Waukegan, Ill.

Wholesale trade list of the Eastern Nurseries, Jamaica Plain, Mass.

"Plants and Plans," handsomely illustrated book of information from the Wagner Park Conservatories, Sidney, O.

"Kelsey's Hardy American Plants," illustrated catalog from Harlan P. Kelsey, Salem, Mass.

"Little Tree Farms," catalog of the nursery department, American Forestry Co., South Farmingham, Mass.

"New Creations in Dahlias," from Peacock Dahlia Farms, Williamstown Junction, N. J.

"Moon's Hardy Tree Shrubs and Plants," unusually handsome illustrated catalog of the William H. Moon Co., Morrisville, Pa.

"Seeds and Plants, 1911," catalog of Vaughan's Seed Store, Chicago.

Winter and Spring Catalog of Seeds and Bulbs from Arthur T. Boddington, 342 W. 14th St., New York.

Everything for the Garden, 1911, from Peter Henderson & Co., New York.

Spring 1911 catalog of strawberry plants from Flansburg & Potter, Leslie, Mich.

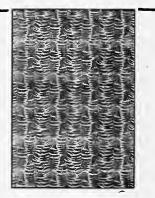
Fruit True to Name: illustrated catalog of Maloney Bros. & Wells, Dansville, N. Y.

New Floral Guide, 1911; Connard & Jones Co., West Grove, Pa.

1911 Annual from W. Atlee Burpee & Co., Philadelphia.

"The Uses of the Modern Gladiolus," illustrated booklet from Arthur Cowee, Berlin, N. Y.

Road Roller catalog from Buffalo Steam Roller Co., Buffalo, N. Y.; handsomely printed and illustrated, with fine half-tones showing rollers at work.



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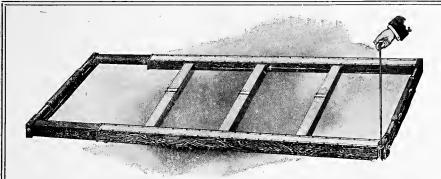
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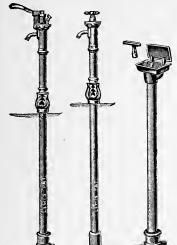
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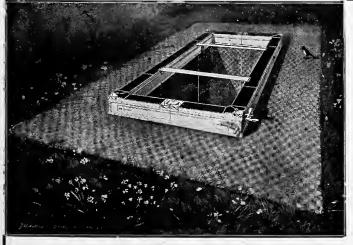
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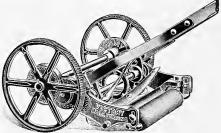


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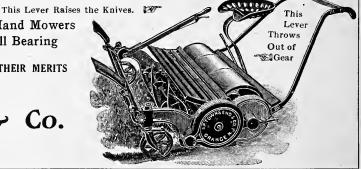
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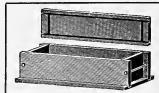
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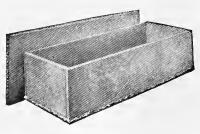
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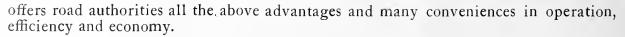
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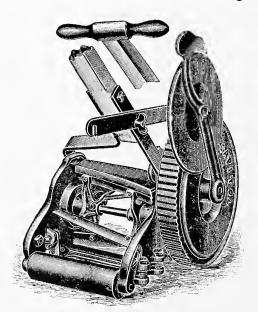
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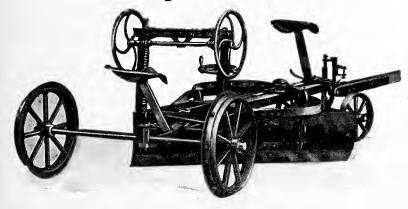
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PARK AND CEMETERY

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Vol. XXI

Chicago, April, 1911

No. 2

The Appalachian and White Mountain Forest Reserves

The passage of the bill providing for the Appalachian and White Mountain Forest Reserves, which was consummated at the last session of Congress after years of effort, has started the department of Agriculture into activity in the direction of acquiring the necessary land, and to this end it has issued a circular intended to give information to the public as to where and what kind of lands are wanted. Under the law, the Secretary of Agriculture is to examine, locate and recommend to the commissoin for purchase such lands as in his judgment may be necessary for regulating the flow of navigable streams, and owners of land, the purchase of which will be considered by the government, are expected, on the basis of the information contained in the circular, to make known to the Forest Service their desire to sell. Lands may be bought only in the States whose legislatures have consented to the acquisition of land by the United States which have already taken the necessary action; these are Maine, New Hampshire, Maryland, Virginia, West Virginia, North Carolina, Tennessee, South Carolina and Georgia; and the first lands to be examined for purchase will be in the Appalachian and White Mountains, which because of their altitude, steepness and lack of protection are in a class by themselves. The circular with full information may be obtained by applying to the Forest Service, Department of Agriculture, Washington. These will be among the most interesting of the U. S. forest reserves.

2 2 2

The Planting Season

In our northern latitudes March winds and April showers, however variable they may be in intensity or continuance, soon declare that it is time for gardening operations, and the evident pleasure with which most people anticipate this time keenly displays the old time love of this domain of nature which has possessed the soul of man from the beginning. It is a very busy time in our cemeteries and parks, and each succeeding year presents so many new problems to solve that the work, hard though it may be in most cases, promises such happy rewards that work becomes indeed a pleasure. The comparative national prosperity of last year leads to the conclusion that a vast amount of improvement will be carried out in all outdoor public places the coming season, a proposition that promises furtner steps towards the dreamed-of "beautiful America."

2 2 2

A Serious Problem in Congested Neighborhoods

A serious defect in our conjested city conditions was pointed out a short time ago in an address to the study class of the Daughters of the American Revolution in Chicago, by Mr. Edward B. DeGroot, general director of playgrounds and fieldhouses of the South Park board. It lies in the fact that no means of exercise or recreation is provided in the tenements and flat-buildings, which are devised only to accommodate as many occupants as can be crowded into the dimensions of the structures for actual living purposes only. The needs of childhood, which comprehend exercise as an absolute necessity, are entirely ignored in these buildings, and as the congestion increases, the child problem becomes still more acute. Chicago is paying the penalty for one-sided phenomenal development, which, although she is spiritedly mak-

ing tremendous efforts to remedy, the tasks are so much the more exacting because the remedies have become more difficult of economic application. It is well recognized that in so far as playground parks and fieldhouses affect the situation, Chicago leads the whole country. To improve conditions Mr. DeGroot suggests that every flat and tenement should be provided with a front and back yard, or there should be a playground in the center of every block; that schools should acquire model playgrounds for the pupils, made so attractive as to induce the children to use them both before and after school hours; that there should be play and social centers for all children who have no church attachments and who are compelled by poverty to go to work instead of to school. The age demands all this; the problems are difficult, but their solution is the price we pay for twentieth century civilization, and this we are undoubtedly willing to do.

2 2 2

The Illinois State Art Commission

Some short time since, the Art Commission of the state of Illinois, which was created under Senate Bill No. 415, approved June 4, 1909, addressed the Governor in a communication in which three important suggestions were made. In a few words they were as follows: That the grounds surrounding the Capitol Building at Springfield were inadequate to make the building and grounds effective, and that more adjoining land should be purchased; that the same might be said of the Supreme Court Building; and that the State Fair Grounds were most crude and unsatisfactory in development. The Commission advised that all these grounds should be improved under plans made by the most competent landscape architects, using the beautiful native shrubbery and trees of Illinois in effective arrangement. Furthermore, the communication closed with this unquestionable truism: "Government should always be an educator of the people in the direction of correct standards and appreciation of the best in art." This broad idea makes an excellent text for the whole country, for it is not difficult to realize what an incentive to the growth of public taste it would be if the landscape settings and art embellishments of our municipal and state buildings could be looked upon as standards by our citizens, and used as examples to which to direct the attention of the young as they advance in general knowledge.

The Location of the Field Museum in Chicago

We do not believe for a moment that any law should be considered so grounded "in perpetuity" that future demands of public service and welfare must be nullified by its continuance, and certainly where such a long legal battle could be sustained, as has been the case in connection with the location of the Field Museum in Chicago, there must always remain a very strong suspicion that the opposing forces have something more up their sleeves than the public welfare. The final decision to locate the splendid gift of the late Marshall Field in Jackson Park is a bitter disappointment to large numbers of Chicago citizens, and in the light of the location of such museums in the greatest cities of the world, it is a great mistake. Jackson Park is from six to eight miles distant from what might be termed the city's civic center, and Grant Park in which it was expected the museum might be placed is practically in the great business district, and considering that the lake front must probably always be marred by the Illinois Central R. R., the sincerity of the single opponent to the scheme is quite questionable in spite of the legal forensic effort to maintain it.



WELL-PLACED AND MISPLACED PARK MONUMENTS

During the past year, The Art Commission of the City of New York has given much time and consideration to the subject of the location of monuments, and has issued a valuable report on this subject. Their locations are among the most difficult questions which the Commission has to decide. These difficulties are due chiefly to the fact that in most cases the monument is not designed for a specific site. When completed, it is submitted for a definite spot which, in most instances, is selected not because it suits the character of the monument but because it is conspicuous, as, for instance, at the junction of two or more important streets or in a prominent place in one of the chief squares or parks.

It is self-evident that the character of the monument should determine the nature of its setting. The all-important question in selecting a site is that it shall be of a character suited to the monument, but usually in order to satisfy the desire for a conspicuous place other considerations are ignored and, as a consequence, many monuments stand in unsuitable locations. The sites for monuments erected before the existence of the Art Commission were not, as a rule chosen hastily but in nearly every case much time and effort were devoted to the selection and in many instances it took several years to reach a decision. That so many monuments stand in unfortunate locations is, therefore, due not to carelessness or lack of deliberation, but to failure to recognize the fact that a well placed monument forms an integral part of its surroundings. Because of this failure to appreciate that there should be a distinct relationship between a monument and its immediate neighborhood, many monuments have no relation to the shape or size of the place where they stand, nor to their surroundings. Some are in the midst of great whirlpools of traffic with skyscrapers towering above them and huge signboards for a background. One can examine and enjoy them only at the risk of life and limb. Swallowed up and submerged in the turmoil and confusion of these prominent focal points of street traffic, these monuments of distinguished men appear as forlorn bronze figures stranded on their granite pedestals. Such situations destroy the dignity and beauty of the monument.

Many monuments consist of massive granite pedestals surmounted by huge bronze busts. In general these have been erected in the parks. Many of them stand on beautiful green lawns, conspicuous objects but without local relation to their surroundings. Surely it cannot be reasonably claimed that they are ornaments to the park or that the green lawns would not be more beautiful without them. It is easy to imagine that some giant striding through the park with a monument under his arm became tired and set it down and left it where it now stands, displacing grass and shrubs and disfiguring the face of nature. It must not be understood that the Art Commission is opposed to monuments in parks, but the Commission is concerned that every monument shall be so placed

as to fit into its surroundings, and above all to enhance the beauty of the park in which it is placed.

The following report of a Sub-Committee on a monument of this character sets forth the attitude of the Art Commission:

"We respectfully report that your Committee have visited and examined all of the proposed sites and do not consider that the work of art is suitable for any of these sites. The bust is of more than usual heroic size, and might almost be called colossal, as it is five feet high, and is to be placed upon a massive granite or marble pedestal, nine feet three inches high, having a base measurement of six feet by eight feet, so that the total height including the bust is fourteen feet three inches. Wherever placed it will be a conspicuous object. Before reaching a conclusion your Committee took occasion to observe the bronze busts of Mazzini and Beethoven, which are now in Central Park, which are similar in their general character as works of art to the proposed bust and pedestal, though possibly somewhat smaller, and they were impressed by the unsuitability of sculpture of this description for any site where lawns, shrubbery and trees are the principal and natural features. The examples mentioned seem to your Committee to illustrate the inappropriateness of placing busts and pedestals of the character now offered in such locations, and to demonstrate that such statuary is a detriment rather than an acquisition to our public parks. It is the conviction of the Committee that works of art of the character of that before us are entirely unsuitable for such sites irrespective of their individual artistic merit and that the Commission cannot consistently approve their acceptance

Curiously, many of those submitting monuments seem to think that because the Commission disapproves of a site as being unsuited to the particular monument, it is thereby condemning the monument itself or slighting the person or event which it is intended to commemorate. It goes without saying that the Commission is in full sympathy with every effort to honor those to whom honor is due, but is solicitious not to dishonor them by honoring them in an unsuitable place. It believes, moreover, that a monument should be so placed as not only to recall grateful memories of the person but to be a distinct ornament to the place in which it stands.

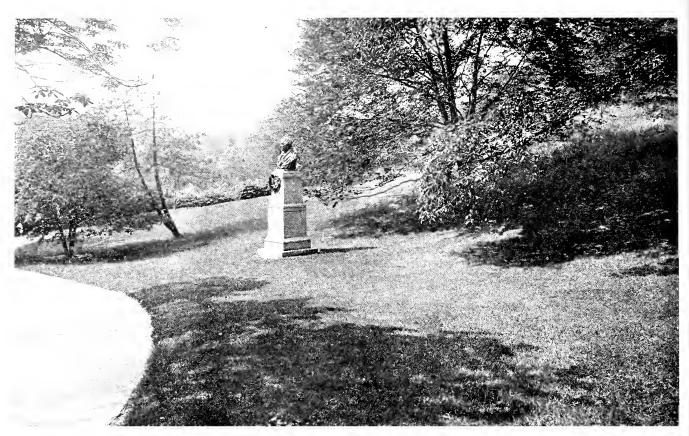
While definite rules cannot be laid down for the location of monuments any more than rules can with finality be given for the composition of a picture or a group of sculpture, yet certain fundamental principles are very evident. A monument should be so placed that it is in proper relation both architecturally and sculpturally to the spot in which it is located, be it street, square or park; that its commemorative or particular character is in harmony with its surroundings, and that it is and will remain a distinct adornment to the locality in which it stands. The



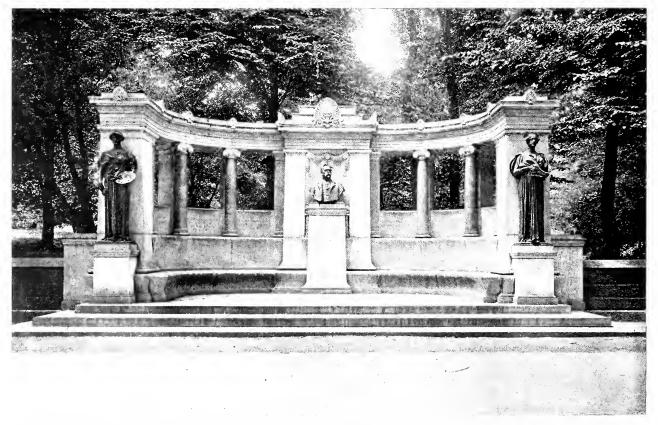
ALEXANDER HAMILTON MONUMENT, CENTRAL PARK, NEW YORK, IN AN UNSUITABLE LOCATION. IT STANDS IN THE BROAD LAWN WITH NO LOGICAL RELATION TO ANYTHING IN ITS VICINITY.



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THOMAS MOORE BUST, PROSPECT PARK, BROOKLYN, HAS NO LOGICAL RELATION TO ITS SURROUNDINGS AND IS MERELY AN EXCRESCENCE ON THE BROAD LAWN.



HUNT MEMORIAL, CENTRAL PARK, NEW YORK CITY. A WELL-PLACED MONUMENT, BECAUSE IT CAN BE SEEN ONLY FROM THE FRONT AND HAS A SUITABLE BACKGROUND.

probable permanence of approprate surroundings should also be considered, for changes in the character and occupancy of adjacent buildings have frequently turned harmony into discord.

These principles in general govern the Art Commission in its decisions on the location of every monument. But these simple principles are frequently entirely ignored by those who offer monuments to the city. They seem to think that any unoccupied space in the streets or parks is suitable for any kind of a monument, provided only that it is conspicuous. Whether the place suits the character of the monument or the monument is appropriate to the place is not given the attention it deserves as the most important consideration involved.



PANTHERS AT ENTRANCE TO CENTRAL PARK, NEW YORK; WELL-PLACED STATUES, EFFECTIVE AND LOGICAL IN THEIR RELATION TO THE PARK.

AMERICAN CITY PARKS AND PLAYGROUNDS

From a Review of "Parks and Recreation Facilities," in the Annals of the American Academy, by John Nolen, Landscape Architect.

City parks are much better known than national parks or state parks. Every city worthy of the name has public parks of some sort, and they are now recognized as a necessity of city life-just as streets and water and schools are a necessity. They contribute to the pleasure and health of urban populations more than any other recreative feature, and furnish the most necessary and available antidote to the artificiality, confusion and feverishness of life in cities. At the present time the value of parks and open spaces in towns and cities is very generally appreciated. It is recognized that such facilities as parks afford are not only desirable, but increasingly necessary; in fact, indispensable. In a vague way there is approval, too, of a large increase in both parks and playgrounds. But few even of the more enlightened communities

appear yet to understand with any clearness that these open spaces in cities are of great variety, that they are, or should be, selected and developed by experts to serve essentially different purposes, and that the failure to appreciate this fact, and to keep it constantly in mind, leads to great waste and inefficiency in our public grounds.

The term "parks" is used in a loose sense to cover all public grounds. City squares, commons, public gardens, playgrounds, neighborhood centers, parkways, the great outlying reservations, and parks proper—all are loosely termed "parks." City squares, commons and public gardens are usually of small size, and are found in the business as well as the residential sections of cities. Their practical functions are to furnish agreeable views for those passing by or through them, to provide a

pleasant resting place for those who take the time to use them in this manner, and in some cases to afford an appropriate and agreeable foreground to public or semi-public buildings. Playgrounds are different from squares, and should be designed primarily for play. They are usually divided for convenience into three classes, those for little tots, those for children of the school age, and those for older boys and men or for girls and women. In no other department of public recreation has there recently been such a development. The Year Book of the Playground Association of America, just issued, shows that out of 950 cities and towns in the United States having a population of 5,000 or over, 336 maintain supervised playgrounds, and the actual number of playgrounds conducted in these cities will number nearly 2,000.

One of the most important results of the study that has been given to play and playgrounds is the very general appreciation that the play leader rather than elaborate equipment is the essential feature. Reliable figures, showing the appropriations for playgrounds, are incomplete, but the returns from onehalf of the cities show an expenditure in 1909 of over a million dollars. But before we have a widespread and efficient system, in which the true function of play is recognized, this sum will have to be greatly increased. "Only in the modern city," writes Jane Addams, "have men concluded that it is no longer necessary for the municipality to provide for the insatiable desire for play. In so far as they have acted upon this conclusion, they have entered upon a most difficult and dangerous experiment, and this at the very moment when the city has become distinctly industrial, and daily labor is continually more monotonous and subdivided. We forget how new the modern city is, and how short the span of time in which we have assumed that we can eliminate public provision for recreation."

Parkways and boulevards are agreeable promenades in themselves, and serve usually as pleasant means of access to parks from the various parts of the city or from one park to another. A parkway is apt to include more breadth of turf or ground planted with trees and shrubbery than a boulevard, giving it a more park-like character and inducing a less formal treatment of the roads, paths, and accessory features. Boulevards are usually arranged more formally with rows of shade trees and parallel ways for pedestrians and vehicles. But the chief feature of a city park system is the large park, comprising in most cases from two hundred to a thousand acres, or even more. Its main purpose is to place within the reach of the people of a city the enjoyment of such a measure as is practicable of pleasing rural scenery; and the justification of its size, interfering as it does with streets and other city developments, is the necessity for spaciousness in the production of scenery that is broad and natural and beautiful. One of the chief problems of the landscape architect is to make these parks available and useful to great numbers of people without destroying the natural appearance of their scenery.

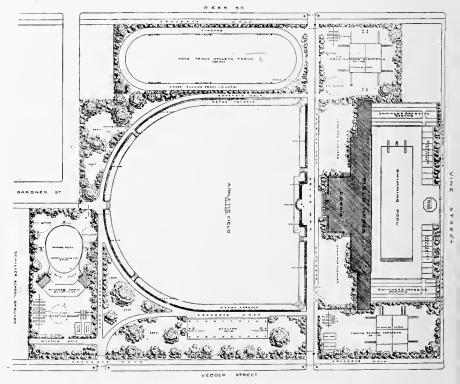
The conviction is steadily spreading that a city needs not only to provide itself with each class of recreation grounds, but that these grounds should be outlined, acquired, and developed as a system, each part having relation to

every other part. Just as a city needs a street system, a school system, a water system, and systems to provide for its other municipal activities, so it needs a comprehensive, well-distributed, well-developed system of parks and pleasure grounds. As yet few cities have been able to secure a well-balanced park plan. Some cities have a liberal provision of public squares, but few playgrounds and parks, and no parkways. Others have large parks and boulevards, but no playgrounds, while still others have parks and boulevards playgrounds, but few public squares. Many examples could be given of the unsatisfactory and incomplete and one-sided way in which our socalled park systems have been developed. The public grounds of practically all our cities have been selected and improved by isolated and desultory proceedings. The result in most cases has led to an unnecessary waste of money and opportunity. Happily, there are exceptions. A few of the larger cities have, with the aid of expert advice, worked out thoughtful and consistent plans, and in the Middle West even the smaller cities have conceived a system, and gradually, piece by piece, this system is being patiently executed.

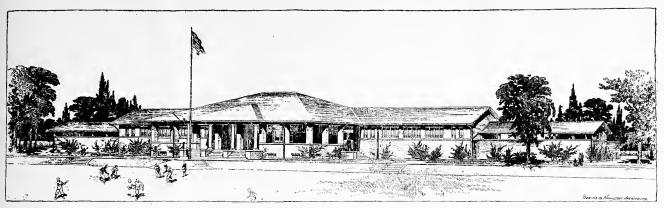
One of the greatest influences now operating toward a better provisoin for parks and other recreation facilities in this country is city planning. The movement is spreading rapidly from city to city and from town to town. Its aims are many, but primarily it is an

attempt to forecast and provide for the requirements of the city as a whole, and to anticipate by a reasonable period the improvements and developments which such a forecast shows to be desirable and in some form or other inevitable. City planning is, therefore, an effort to save waste-waste due to thoughtless delay, to haphazard procedure and to ill-considered plans. When city planning is wise it works in harmony with local conditions, takes account of topography, and responds to the peculiar social and economic influences of the locality. One of its dominant purposes always, however, is to promote, to extend, and to make more adequate and more perfect the provisions for public recreation.

The conclusions that appear justified by this brief survey of parks and pleasure grounds are: (1) That the national parks are of inestimable worth, but their greatest value requires a somewhat different administration, and the existing parks in the West should be supplemented and balanced by parks in other sections. (2) That the comparatively small beginnings of state parks should be carried to their legitimate developments until every state in the Union has a comprehensive system, embracing its most valuable and characteristic natural scenic resources. (3) That city parks should be selected with more discrimination, designed with more skill, greatly increased in area, and developed in a more co-ordinate fashion.



PLAN OF STANTON PARK; LINCOLN PARK SYSTEM, CHICAGO.



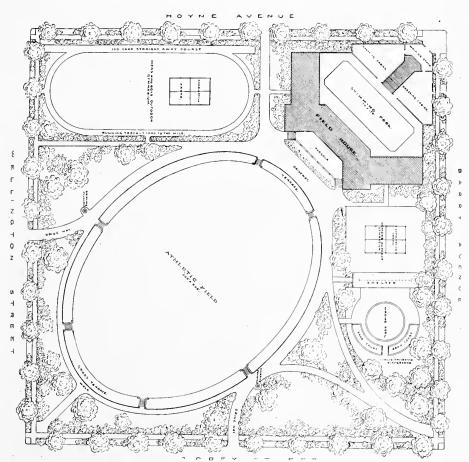
FIELD HOUSE IN STANTON PARK; LINCOLN PARK SYSTEM, CHICAGO.

NEW PLAY PARKS FOR CHICAGO'S NORTH SIDE

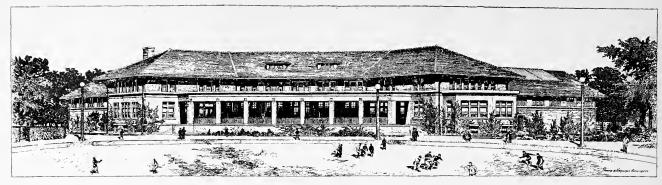
An example of the modern tendency in playground development is exemplified by the playground of ten acres just being finished by the Lincoln Park Commissioners of Chicago. Hannibal Hamlin Park, named for the vice-president during Abraham Lincoln's first term of office, is located in one of the congested Chicago factory areas. Its size-ten acres-is the maximum fixed by the Juul law, a legislative act of Illinois providing for these neighborhood centers, and it seems to be a size well adapted for the class of work for which these institutions are planned. In many respects the plant differs from others of similar size in the city, the main feature observed being that of grouping all indoor activities under one roof. The grounds, nearly square in shape, are laid out on a diagonal axis, the building forming the dominant feature of the composition. The field house, designed by Perkins & Hamilton, of Chicago, is of oriental brick, which, with its green tile roof and long horizontal lines, gives an architectural effect which is in keeping with the park landscape. Gymnasia occupy two wings, each being 42x79 feet-a size somewhat in excess of most playground gymnasia, but which has proven to be necessary to meet the demands of the large classes. Adjoining the gymnasia are shower baths and locker rooms provided with ample toilet fixtures. The ground floor also provides a library and reading room well lighted and of ample size. The lunch room and the director's office are also on the first floor. Above is located the assembly hall, 40x72 feet, provided with stage, dressing rooms and check room. The stage is especially arranged for group work and the necessary drop curtain, foot-lights, etc., to facilitate the staging of amateur theatricals. Contiguous to the assembly hall are two club rooms, each 21 ft, x 40 ft. A spacious observation platform

commands a view of the grounds, providing an unusual opportunity for the seating of musicians during band concerts. The swimming pool is of reinforced concrete, 50x150 feet, and ranging from 3 to 9 feet in depth. Bathers enter through a common gate, receiving bathing suits and towels, and pass either to the right or left to waiting bleachers arranged in two sections, each accommodating 116 persons. Each person is provided with a separate dressing room. The groups enter the pool after passing under a shower bath and are

given a certain fixed time in which to bathe, after which they retire to their dressing rooms to give place to another group. Three days a week are allowed to men and boys, two days to women and girls, the remaining two days being used to empty and clean the pool. To further aid sanitation, water is allowed to run through constantly and is tempered by an admixture of warm water as necessary. The ground provides a sunken athletic field, 300x408 feet, to be used in summer for general athletic sports and in winter for skat-



PLAN OF HAMLIN PARK; LINCOLN PARK SYSTEM, CHICAGO.



FIELD HOUSE IN HAMLIN PARK, LINCOLN PARK SYSTEM, CHICAGO.

The men's and boys' gymnasium field is fenced separately, containing combination frames for athletic purposes and fitted out with a seven-lap running track. The women's and children's playgrounds are adjacent, separated only by an open shelter and being enclosed by the same fence. The grounds, other than the outdoor gymnasium areas, are unfenced, emphasis being given to the walk entrances by thickly massed shrubbery along the boundaries. The main building is set off by shrubbery plantations and flower beds and by a well arranged system of flower boxes placed at intervals along the balcony edge.

Two other small parks are under construction by the commissioners, one of

peculiar interest being Stanton Park, located near the Chicago river, in an unusually congested district. The children's playground in this case is isolated from the women's outdoor gymnasium field, the children being provided with a pergola containing toilet facilities. A kindergarten teacher is in charge of this department at all times and leads the children in juvenile plays and games. Inasmuch as this playground is distant but a few blocks from another of the system the two field houses are arranged to be complements of each other in general facilities, in one case containing gymnasia, assembly hall, library, lunch room, etc.; in the other an open loggia, shower baths and an auxiliary swimming pool with necessary equipment. In designing these grounds as much emphasis as possible has been placed on the gardening features and considerable areas of lawn and shrubbery plantations, together with flower beds, trees and vines are furnished.

A third park of ten acres named for Lincoln's noted secretary of the navy, Gideon Welles, is located in one of the less congested portions of the park district, and has been designed with the idea of providing merely a restful lawn area, with meagre facilities for sports, until such a time as the increased population of the neighborhood shall demand a more complete equipment. The interesting features of this park will be considered in a later issue.

PUBLIC RIGHTS TO THE LANDSCAPE

The doctrine of public rights in scenery is becoming more and more firmly established, and yet there seems to be no abatement in the impudence of the advertising sign companies. Lands along the great railway thoroughfares are in greater demand than ever before for the erection of the hideous monstrosities called "signs." At every turn one is confronted with the advertisements of a soap or nostrum. If you take a railway journey you are beset on every side with catch-penny advertisements. Looking from the advertising in the so-called "literary" magazine to the billboard you are confronted with the same names and testimonials.

It is time that it was generally understood that natural beauty is an inheritance of all the people, that it has a real value like pure air and fresh water, and that the man who destroys it therefore violates as distinctly the rights of the public as one does who fills the air with noxious vapors or pollutes the sources of public water supply. Few people even now, after years of public discussion, realize the fact

that landscape beauty unadorned is a mental and spiritual necessity for a healthy, happy people.

The plain truth is, that natural beauty has an intrinsic value as a refreshment to the spirit, and a restorer of the health of mind and body. It is practically and actually effective in making such appeal to the imagination that as we contemplate it we are elevated for the time above the wear and weariness of every-day life into an atmosphere of restoration and repose-into a realm of higher and serener thoughts which bring health to the body through their tranquilizing influence on the spirit. In short, the contact with natural beauty is one of the potent agencies for establishing sound minds in sound bodies; and since this is the source and condition of all well-directed ambition and effort, a reckless destruction of this beauty is a blow not only at one of the highest and most satisfying pleasures of the people, but at the public health and the public wealth.

This is not a merely sentimental or fanciful view of the case. When Lowell writes that "the landscape, forever consoling and kind, pours her wine and her oil on the smarts of the mind," when Wordsworth asserts that the presence of nature "disturbs him with the joy of elevated thoughts," and whenever, in the highest poetry, the elementary and controlling feelings of the soul find expression, this profound truth is recognized. No enlightened man disputes it. Why, then, should it not be accepted as sound doctrine that it is one of the inalienable rights of man to enjoy the unimpaired beauty of the world into which he has been born, and that it is the duty of society which has inherited this beauty to transmit it unimpaired to posterity? We may be assured in the first place that this is no transient sentiment which will pass out of fashion. The imagery of the Old Testament and the earliest poetry of the world prove that these same emotions swayed the races who laid the foundations of our modern civilization. Susceptibility to the influence of natural beauty is one of the original and essential qualities of the human mind, and it is never likely to be outgrown. Indeed, we may be sure that the beauty of the outward world which is preserved for posterity will be more highly appreciated by them than it is by us, for this feeling has grown in depth and strength with the growth of the race, and it will probably continue to grow.

Laws for the protection of scenery and the elimination of the billboard nuisance are all very well, but we need more than a public sentiment. We want a public conscience in this respect, which will do more than merely resent the wanton defacement of natural beauty—which will take pains to preserve and develop by reverent treatment scenery which inspires noble thoughts by its sublimity or soothes and refreshes the mind by its beauty.

Nearly twenty years ago the editor of Garden and Forest said: "A few in-

telligent men are now making protest against stripping the forests from our mountain tops because this impairs the natural and needed supplies of timber and water. Why not also protest that the destruction of the woods mars the beauty of the landscape which is our common inheritance? When this subject is properly brought home to the intelligence and moral sense of the people the reckless destruction of natural beauty will not only be held a misdemeanor in law, but it will be considered a gross outrage against common decency, and the man or corporation who heedlessly and needlessly defaces the beauty of the world will be considered a public enemy."

Recent legislation would indicate an awakened public conscience in matters

relating to the preservation of the beauties of nature and the elimination of things which disturb the sensitive eyes as well as the better legally protected ears and nose. And yet much remains to be done. The spirit of commercialism is thoroughly organized and absolutely indifferent to anything but the almighty dollar; there is nothing to combat the billboard and numerous other nuisances under the name of advertising except the public conscience, and this can only be successfully manifested by individual sentiment and action. Do not buy articles advertised in an obnoxious way, and write or personally interview your legislative representative whenever a question regarding scenic preservation is being consid-J. H. Griffith. ered.

NEW METHODS IN ROAD-MAKING WITH TARVIA

The experience of the last few years has demonstrated to road engineers everywhere that a turning point has been reached in the problem of maintaining macadam roads against the disintegrating forces of modern traffic.

When the destructive action of the automobile tires was first observed, surface applications of bituminous binder were believed to be all that was necessary. Experience has shown, however, while surface treatments, cost considered, give good results, it is often more satisfactory and economical to construct the road throughout with a bituminous binder.

It is apparent now to the most casual observer that the road problem must become not one of the protection of the surface alone, but one which concerns the building of the road from the foundation to the top. Engineers, more earnestly than ever before, are seeking to bond together their road materials in a way to get lower maintenance costs.

In Tarvia, a prepared coal tar of great tenacity and viscosity, engineers have found a bituminous binder which has given remarkable results, and recent improvements in construction of Tarviated roads are of much importance to park and cemetery engineers.

Cumulative experience has taught engineers the economy of putting Tarvia in the body of the road itself as a binder. The problem was to find a method of road building with Tarvia, which with little or no additional cost over that of present macadam road construction, would provide a road strong enough to hold up under modern traffic conditions and proof against the destructive action of automobile tires.

In 1906 in Somerville, Mass., the experiment was tried of bonding the top layer of 1¼-inch stone in a macadam

will flow freely at a suitable temperature; one that will distribute easily through the prepared surface of stone;



SPRAYING TARVIA X ON THE BROKEN STONE AS A BINDER.

road with Tarvia. The Tarvia was sprayed onto the road hot from a tank wagon, in a single coat of 1½ gallons to the square yard. The Tarvia was covered with pea stone and the road rolled until solid. This first and now classic experiment was a forerunner of what is now known in the United States as the penetration method of bituminous macadam road construction.

The desirability of using two coats of Tarvia instead of one was soon demonstrated and the method framed into a specification called "Tarvia Filled Macadam," which has become known wherever good roads are built.

A material for this purpose must necessarily meet very trying conditions. It must combine in itself a material which

one that will adhere strongly to cold stone; one that will set up and bind the road into a solid mass. It must also have the property of recementing, if for any reasons the pieces of stone become separated during the consolidation of the road. Preparations of tar alone fulfill all these exacting requirements, and Tarvia has been generally recognized by engineers as a standard material.

The form of construction and the method of applying the materials must necessarily be varied to suit local conditions. In striving to meet the exacting requirements of the broad radiating thoroughfares extending out from the metropolitan centers, a new form of construction has been developed during the past two years to which the name of

"The Tarvia Modern Pavement" has been given.

In this construction Tarvia enters not only into the top surface of the road, but is carried down beneath the top course. Coupled with the use of Tarvia throughout the road is the use of larger stone in the second course. Experiments with this form of construction through the past two years have shown its superiority over other forms where a considerable amount of traffic of all descriptions is to be carried on the road.

Splendid examples of the Tarvia modern pavement construction can be seen in Massachusetts on Massachusetts avenue, in Cambridge; on Beacon street, Brookline, and in Worcester. In Canada roads have been built which are giving excellent service in Westmount; on the Victoria pier, Montreal; in Berlin, Ontario; Guelph, Ontario; and Stratford, Ontario.

The foundation of the Tarvia modern pavement is prepared as for ordinary macadam, but care should be taken to see that this foundation is properly drained and properly consolidated, for the best of surfaces can be destroyed by softness and movement below. Upon the foundation the base course is laid, using a run of crusher stone 3 inches to 1 inch in size. Usually a thickness of 4 inches, measured after rolling, will be sufficient. This course is filled, rolled as for ordinary macadam, and then has spread upon it 1/2 inch of clean, sharp sand or good gravel. Over this, without further rolling, is sprayed Tarvia-A to the amount of one gallon to a square yard. Another layer of run of crusher stone (3 inches to 1 inch) is spread over the Tarvia-A to such a depth that when rolled this course will be two and one-half inches thick. It is then rolled thoroughly with a steam roller until the Tarvia and sand are drawn up between the stone and until this layer of stone is bedded firmly into the stone below. The layer of Tarvia and sand holds this course firmly in place and cements the top course of the road thoroughly to the bottom course. A spraying of Tarvia-X, a denser grade of Tarvia, is then given to the road, using 11/4 gallons to the square yard, and a thin layer of 3/4-inch stone is spread over the surface. Enough stone must be used to fill in all the chinks of the surface, making it smooth, but not enough should be used to leave any loose material on the top. The road is rolled again until perfectly smooth and a final coat of "Tarvia-A," amounting to one-half gallon to the square yard, is sprayed on, and the road finished by adding pea stone or screenings and given a final rolling.

The Tarvia modern pavement is described at some length in order that engineers may recognize its novel features and appreciate its merits. The thorough incorporation of the Tarvia throughout the road insures the binding of every part and the elimination of the internal friction which is so destructive to macadam roads. To the reduction of the internal friction the success of the "Tarvia Filled Macadam" is largely due, and in the Tarvia modern pavement this internal movement is reduced to practically nothing.

The use of large stone throughout the road and in the surface layer insures a structural strength not obtainable with

smaller sizes of stone. This strength giving principle has long been recognized abroad, but with a water bound macadam it was not possible to use this form of construction satisfactorily. The anchoring in of the stone in the wearing course by the sand Tarvia matrix now makes the use of the larger stone feasible.

The use of large stone with Tarvia also obviates a difficulty sometimes experienced in bituminous construction. Since the large stone reaches practically through the whole depth of the course, rolling up of the pavement is prevented and the surface remains smooth and without hollows under all conditions.



The Milwaukee, Wis., city council has decided to buy a stretch of 500 acres along three miles of the upper river for a public park at the cost of \$1,000,000, the cost to be paid in twenty annual installments.

A federation of associations interested in the parks, playgrounds and recreation places of Queens Borough, Long Island, N. Y., has been organized and a committee appointed to formulate a plan and scope for the federation. It will push the work of acquiring park and playground lands and will pass on the advisability of projects presented to it.

Bonds to the amount of \$75,000 to bear four per cent interest and run ten years, for park and boulevard improvement, have been authorized by the Toledo, O., council.

The care of the California Redwood Park has been turned over to the new state commission, and the commission has already commenced active work in improving it.

Boise, Idaho, hitherto practically a parkless city, is waking up to the fact and is moving to secure lands for parks and playgrounds.

Billings, Montana, has a new park commission. It has had such commissions before, but lack of funds prevented park progress. It is now expected that the council will make a levy for park purposes and work in park matters will begin to move.

The Oliver Machinery Company has notified the park board of New Orleans, La., that it will donate to the city a tract of land on Cedar street for park purposes. The land lies next to the lot purchased from the company

by the city and will add to Creston Park and playgrounds.

The plans of Carrere & Hastings, architects, for the development of Hartford, Conn., on the "city beautiful" idea are attracting much favorable comment in that city. The plan states that Hartford possesses advantages, natural and otherwise, which give it 90 per cent of the conditions necessary to the ideal city.

By the death of Mrs. Sarah A. Holmes, of Marion, O., widow of the late Barnabas Holmes, the town comes into full possession of what is known as the Natural Park, some 15 acres in area.

Mayor S. M. Hoyer has appointed the first park commission for Altoona, Pa., which was authorized some months ago by ordinance. The city already has two small and one good sized park, with prospects of securing others.

Under the civic center plan of city beautification, the board of appraisers of Denver, Colo., has placed a valuation of \$2,523,463.10 upon the property to be acquired for the purpose.

Frederick Law Olmsted, in pursuance of his idea that every child should have a playground and every mother a breathing spot within easy walking distance of their homes, points out 15 instances of "special park opportunities" in the final section of his report on city planning, made to the Pittsburgh, Pa., Civic Commission.

The plans for the improvement of Balboa Park, San Diego, Calif., presented by Olmsted Bros., Boston, were accepted by the park commission.

The Parking Commission of New Orleans, La., holding the view that

whitewash injures trees and destroys their beauty as well, and that it was authorized to prevent such treatment of public trees, notified the commissioners of North Rampart street and of Ursuline street, to discontinue the whitewashing of trees along those thoroughfares. The commission intends to have the use of whitewash on the trees of the city entirely discontinued.

The city attorney of McAlester, Okla., filed a petition in the superior court asking for the condemnation of 879 acres of land adjoining the city of McAlester to be used for city parks and county fair grounds.

One would think that any bank management would include enough of that higher intelligence which is so strenuously condemning billboard depredations of our public places; but it is not so. The First National Bank of Norfolk, W. Va., sets a very bad example in this direction, and the "Bankers Publicity" says quite a number of banks are unfortunately using this form of advertisement.

PARK IMPROVEMENTS

Work upon the proposed new bandstand to be erected on Boston Common, the design for which has just been selected, will begin in the immediate future. It will cost about \$20,000. The proposed stand, which will be erected as a memorial to the late George F. Parkman, the donor of the \$6,000,000 Parkman fund, will be the first structure to be built from this fund. It was designed by Richard B. Derby.

The city jail chain gang has been turned loose on the \$750,000 block of City Hall land, in Seattle, Wash., to make of it some use in the way of a park until it is needed for City Hall purposes.

Hollenbeck Park, Los Angeles, Calif., is to have an attractive boat house, with pergola and refectory building as attachments.

Macon, Ga., has appropriated \$3,000 for commencing work on the play-grounds and park at Tattnall Square.

A large amount of money will be expended and much work done on the Essex County, N. J., park system this season.

The grounds about the Talladega public library, Talladega, Ala., are to be improved substantially.

Queen Victoria Park, Niagara Falls, Ontario, is to undergo a transformation this season, a large amount of general improvement having been planned.

With the joint approval of the

Board of Park Commissioners and the Sixth District Agricultural Association of California, the plans for Exposition Park, north of the race track or speedway, at Los Angeles, as prepared by Wilbur David Cook, Jr., will, in all probability, be carried out on a comprehensive and uniform scheme within a year. The first cost will be approximately \$100,000, and thereafter the city must spend at least \$10,000 annually in further improvements.

Fairmount Park, Riverside, Cal., is to be improved by Wilbur Cook, land-scape architect, of Los Angeles, under the recent bond issue of \$30,000. The park board is arranging to have the famous collection of cacti in White park classified and labeled by government experts. The work will be done under the supervision of Director Thompson of the St. Louis botanical gardens.

Construction of the extension of the Lynn-Fells parkway in Melrose, Mass, has commenced and will be rushed to completion. The stretch extending across the city land at Ell pond and from Green street to Bellevue avenue will be of great benefit to the city. This roadway, together with a new strip to Bellevue avenue, the state will pay for the work, and it will open up for development by the city the Ell pond area, which has been held by Melrose for several years. This area is to be turned into a large park, with playgrounds, boating and bathing facilities, athletic field, etc., and the city government has been asked to appropriate \$25,000 to start the improvement, which will be in charge of the park commission.

Chico, Butte Co., Cal., will have. in the generous donation of land by Mrs Bidwell, said to be of the value of \$100,000, an opportunity to possess one of the finest parks in the state. Mrs. Bidwell makes a number of stipulations which will undoubtedly be agreed to, one of which, the exclusion of automobiles from the park, being clearly for the protection of the children, for whom the gift was made more than for any one else, says the donor.

Where the round house stood in West Kalamazoo, Mich., the Michigan Central R. R. proposes to make the spot a park.

The city council of Atlantic City, N. J., last month passed the bill, which creates the Inlet Park and Children's Playground, the first to be established at a cost of \$210,000. Yachtsmen hope that when the city improves the water front of 1,500 feet,

it will provide a proper public landing place.

The new park at 20th street and Hammond avenue, Duluth, Minn., is being improved, and it is not yet decided whether the John H. Hammond memorial, to be located therein, will take the form of a memorial fountain or statue. The place will be made one of the beauty spots of the city. The calcium chloride treatment for the surface of the boulevard which was tried with success last year will be used again this season and it is promised that there will be seven and one-half miles of dustless road on this popular drive, from Fifteenth avenue east to Sixty-seventh avenue west. The western extension will also be treated for the elimination of dust.

The directors of the Galveston, Texas, Garten Verein, at a meeting held Sunday morning at the garden, adopted plans for the memorial to the late Albert Kuhn, a former director of the association, and for the rearrangement of the tennis courts.

The work of parking the grounds of the University of Redlands, Cal., is being pushed, under the direction of Isaac Ford, a member of the board of trustees of the university and the landscape gardener.

The offer of 22 acres for the creation of Nelson Park, made by the Nelson heirs, to Columbus, O., but which contained conditions unacceptable to the city, has been modified, and in all probability an arrangement will be concluded.

An exposition park on 15 acres of the old State Industrial School site, Rochester, N. Y., is now under way, and is expected to be ready for visitors by midsummer. The whole site comprises some 40 acres, and for the improvement of the above 15 acres the council has voted \$180,000.

George A. and James L. Rumsey and the Michigan Chair Co., Grand Rapids, Mich., have very generously aided the city in acquiring a site for a park in the 12th ward. It will be an attractive addition to the park properties.

The park commissioners of Saratoga, N. Y., will take over Congress Spring Park and Mineral Spring on May 1, and they will be made free to the public. The purchase of the property is a part of the state reservation of mineral springs, the taxpayers having voted \$250,000 to create a public park in conjunction with the reservation. The village paid \$100,000 for the property, which is one of the most attractive places in Saratoga Springs.



THE NATIONAL FLOWER SHOW AT BOSTON

Under the auspices of the Society of American Florist and Ornamental Horticulturists the greatest flower show that this country has ever produced has been held in the Mechanics Building upon Huntington avenue, Boston, Mass., March 21 to April 1, 1911.

It was first intended to hold the fete in the Horticultural Hall, but wise counsel prevailed, with the result that the larger building gave ample room to gather together plants and exhibits not only from the conservatories and museums from Boston and vicinity, but from distant points of the South and Middle West of this country.

Mechanics Building might be described as two great buildings joined together. There is the grand hall that will seat over 10,000 people on the floor and the exhibition hall of a larger area, with a basement and second floor for special exhibits.

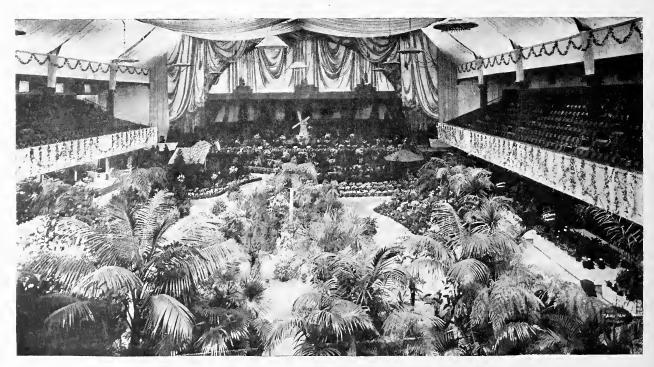
The first impression upon passing the ticket-taker into the exhibition hall is to see an avenue of green composed largely of bay trees of both forms and specimens of topiarian work in box.

Fortunately for this show it was held immediately after the Automobile Show, before the decorations of that occasion could be removed. In the exhibition hall a form of lattice had been erected to disguise the steel columns and trusses with bunting covering the brick walls where needed to harmonize with the general design. Trailing and climbing upon the lattice was imitation wistaria vine in bloom, and real climbing roses, and where needed to create contrast green imitation oak leaves and real English ivy gave to the whole hall an air at once both appropriate to such an exhibition and very artistic.

In arranging the exhibits a happy arrangement was devised, unlike the usual flower show in that the colors of the various flowers were so located as to harmonize or be in such a position that they would not clash

with their near neighbors. This was done by the use of living specimens of evergreen, not only the conservatory type, common in decorations, but living specimens of box and bay, and evergreens dug from nurseries, boxed, ranging in size from Mugho pine to the white pine and the hemlock. Specimen plants of the other evergreen families, such as the spruces, firs, cedars, cypresses, and so forth, made the general effect of a closely grown pinetum. The topiarian art so much loved by a school of gardeners of a past generation was well exhibited in the forms of a box peacock, a box pig, a box chair, a box urn and other forms loaned and exhibited by importing nurserymen and florists. .

In this hall novelties were not lacking, giving an added interest to the layman whose technical knowledge was limited—such as competitive table decorations of sweet peas or carnations. The Song of the Rose was illustrated in the rose section



VIEW OF THE NATIONAL FLOWER SHOW AT BOSTON.

with a violin and bow strung with ribbon over a rustic wood support near a sheet of music, entitled "Roses Bring Dreams of You." Besides the usual flowers displayed, the section given over to roses was one of great merit. One especially was designed as an enclosed rose garden with graveled walks leading about the beds. Inside a well designed fence, over which the roses climbed in a natural manner, and at the rear a rose arbor displayed to advantage the various climbing types. In another section the kinds of roses commonly used by landscape architects, such as Lady Gay, Dorothy Perkins, Hiawatha, ete., trained in a trellis in large pots, displayed the power the expert has with the aid of a hothouse over the summer blooming plants and the natural order of nature.

Entering the grand hall, one passed through the evergreens massed about the outside of the hall to give a background for the exhibits. The arrangement of the whole floor space was in the form of a formal garden with the walks of gravel over which the visitor walked in imitation of the real garden. To give a little variety to the scene a windmill in action was placed upon the platform and the various plants arranged about to form a Dutch garden idea.

As an entrance to the garden on one side was a thatched roofed gateway and adjoining a little tiled roofed tea house in a bed of conifers; on the other side a rustic arbor and trellis was arranged that the way-farer might rest awhile and contemplate the beauties of the scene. In this hall the decorations also of the previous show gave added charm to the exhibit.

One of the best features of the show was an illustrated lecture given by a man thoroughly in line with his subject, Mr. John Dunbar, of Rochester, N. Y., upon "Trees, Shrubs and Flowering Plants." In his talk many of the beauties of flowering plants were illustrated that were found to be

perfectly hardy in the northern range of states of this country—many that were not cultivated or placed upon the market by nurserymen. The collection of native Hawthornes was interesting, in that many forms and species have been discovered and brought into proper keeping in both the arboretum at Highland Park, Rochester, of which Mr. Dunbar is the director, or in the Arnold Arboretum of Boston, and found to be both hardy and very ornamental.

The lumiere colored slides loaned by a friend of Mr. Dunbar's for the lecture showed perfectly the colors of azealeas and rhododendron in full bloom. This is a field of photography that will give the most careful represontation of the color and characteristics of the flowers far superior to any that ean be painted by hand. The National Flower Show has been such a success that it is proposed to hold another three years hence, in 1914. Other cities will need to strive to surpass this exhibition from all points of view. HERBERT J. KELLAWAY.

A REPORT ON AMERICAN CITY PLANNING

We have frequently noted in these pages the rapid growth of the new science of city planning and have reviewed from time to time the handsome and comprehensive city plan reports that have been prepared by a number of men who have become known as experts in this line of work. The growing demand for definite information and literature on this subject has led Mr. Edward J. Parker, of Quincy, Ill., president of the Illinois Outdoor Improvement Association, to collect as much information as was available from many sources in response to a request from a Chamber of Commerce that was contemplating the inauguration of a movement for a civic center which is generally one of the chief features of the city plan.

We have reviewed in these pages a number of fine city plan reports by Mr. Charles Mulford Robinson, of Roehester, N. Y., and Mr. John Nolen, of Cambridge, Mass., who have probably done more work of this nature than any other men in this country. Mr. Robinson, in his letter to Mr. Parker, writes as follows as to the steps that have geen taken to carry out his recommendations in cities for which he has prepared reports:

Denver—The civic center project has been formally approved by action of the people and officials, and is now in the first stage of realization. A full account of this is given in the May number of "The American City" magazine.

Los Angeles—The city has purchased as a site for its new city hall most of the land which I recommended for that purpose in order to consummate grouping of the public buildings.

Honolulu—A very vigorous campaign to locate the new post office on the site I proposed in order to group the buildings in a civic center has recently failed.

Cedar Rapids, Iowa—The city, in accordance with my suggestion, has sold its old city hall and has purchased a neglected island in the river where a temporary city hall is already in use. All this is in accordance with my recommendations for the creation of a civic center on the island.

accordance with plans made by me. The post office, public library, coliseum and city hall are already grouped on the river front.

As to civic centers in other cities, you are familiar, of course, with the Cleveland project, and with that of Springfield, Massachusetts. In Providence, as you also doubtless know, a pretty good civic center has already been realized. Olmsted and Brunner have recently made plans for one in Baltimore, but I do not know with what chances of realization.

The American Civic Association has also given considerable attention to this subject and at the last convention of this organization an entire day was devoted to the subject of city planning. The association has a limited supply of some of the city plan reports that have been published and will send information and prices of those that may be had from the secretary, Richard B. Watrous, Union Trust building, Washington, D. C.

Mr. John Nolen furnishes the following list of the cities for which he has prepared reports and also an approximately complete list of other eities that have had reports:

BOOKS AND REPORTS BY JOHN NOLEN.

Harvard Square, Cambridge, Massachusetts.

"Remodeling Roanoke." 97 pp. Iliustrated. Boards 1907. Price, \$1.00 net.

"San Diego: A Comprehensive Plan for its Improvement." 109 pp. Illustrated. Boards 1908. Price, \$1.00 net.

"State Parks for Wisconsin." 94 pp. Illustrated. Cloth 1909. Price, \$1.00 net.

"Replanning Reading: An Industrial City of a Hundred Thousand." 100 pp. Illustrated. Board 1910. Price, \$1.00 net.

"Montclair: The Preservation of Its Natural Beauty and Its Improvement as a Residence Town." 101 pp. Illustrated. Boards. Price, \$1.25.

"Plan for the Borough of Glen Ridge." 45 pp. Illustrated. Paper 1910. Price, 50 cents net.

"Madison, a Model City." (In preparation.)

"Repton's Art of Landscape Gardening." 275 pp. Illustrated. Boards. Price, \$3.00 net.

ric center on the island.

Copies can be had through booksellers or from the American Civic Des Moines—A civic center is exceptionally far advanced here, in Association, Union Trust Building, Washington, D. C.

LIST OF TOWNS AND CITIES	ENGAGED IN CITY PLANNING.
LANDSCAPE ARCHITECT OF	
CITY. CITY PLANNER. Altus, Okla. L. P. Jensen	
Atlantic, N. J.	. City Improvement Com'n, Walter M. Edge, Chairman.
Baltimore, Md. Olmstead Bros. Roland Park, Baltimore. F. L. Olmstead, Jr	
Boston, Mass Society of Architects	Society of Architects, Irving F. Guild, Sec'y.
Boston, Mass. Boston, Mass.	Metropolitan Improvement Commission, Benj. N. Johnson, Chairman. Metropolitan Park Commission, John Woodbury, Sec'y., 14 Beacon St.
Buffalo, N. Y	
Chicago, Ill Daniel H. Burnham	
Cleveland, O. Daniel H. Burnham John M. Carrare	
Arnold W. Brunner, 33 Union St	·
W., New York Colorado Springs, Colo	
Columbia, S. C Kelsey & Guild	 The Columbus Plan Com'n, Austin W. Lord, Chairman, 345 Fifth
Denver, Colo	Ave., New York.
Detroit, Mich. C. M. Robinson. F. L. Olmstead.	
Gary, Ind	
Grand Rapids, Mich	
Harrisburg, Pa	
Building, Boston	J. Horace McFarland, Municipal Art Society, Walter Shutz, Sec'y., 50 State St., Hartford,
Indianapolis, Ind	
Jamestown, N. Y	
Janesville, Wis Dr. C. C. Dwight	
Jersey City, N. J.	change Pl.
Kansas City, Mo	Art Commission.
LaCrosse, WisJohn Nolen	
Los Angeles, Cal	
Madison, WisJohn Nolen, Harvard Sq., Can	1-
bridge, Mass	Citizens' Committee, Charles N. Brown.
Bldg., St. Louis Milwaukee, WisJohn Nolen	
Minneapolis, Minn	
Newark, N. J John Cotton Dana	
New Haven, ConnOlmstead Bros	Roard of Trade John Cotton Dana Chairman
	Central Commissions of Parks and Avenues
New York City Harold A. Caparn (Water Par	k,
Jamaica Bay) Oakland, Cal C. M. Robinson	
Omaha, Neb	···Park Commission, C. D. Jewell, Sec'y.
Philadelphia, Pa	···Municipal Art Com'n. ···Allied Organizations, Andrew Wright Crawford, Sec'y., 701 Stephen
	Girard Building. Pittsburg Chapter, A. I. A., by its Committee on Civic Improvements.
Portland, Maine Olmstead Bros. Portland, Ore Olmstead Bros.	
	Henry A. Barker, Sec'y Metropolitan Park Commission, 32 Custom House St.
Reading, Pa	Civic Association.
Ridgefield, N. J C. M. Robinson	Mrs. Lydia H. La Baume.
St. Louis, Mo	Capitol Approaches Com'n.
San Diego, Cal. John Nolen	Julius Wangenheim.
Savannah, Ga. John Nolen Scranton, Pa. John Nolen	Geo. N. Baldwin.
Seattle, Wash John C. Olmstead	Mrs. C. S. Weston.
Springfield, Mass.	Special Parkway Com'n, Nathan D. Blie, Chairman.
Staten Island, N. Y. Walla Walla, Wash	•••
Washington, D. CF. L. Olmstead Daniel H. Burnham	•••
Charles F. McKim Augustus St. Gaudens	•••
Watertown, N. Y	Improvement League, Lorin R. Johnson, Pres.

STUDY OF CONTINENTAL LANDSCAPE GARDENING

An address by Albert D. Taylor before the Massachusetts Horticultural Society, with Stereopticon Illustrations.

(Concluded)

We have now reached in our discussion that which appeals to me as being the real heart of continental gardening—in Italy, at least—and perhaps throughout Europe. This is a study of the gardens of the great Italian Renaissance. The student finds here a group of villas possessing a series of characteristics peculiar to this period. The ever dominating and foremost principle on which the design of these great villas is based is that, as the house is designed for its various uses, with its numerous subdivisions, fulfilling different requirements, so should the garden be divided into its different parts for the enjoyment of the occupants of the building. Thus one finds a principle which is a keynote of the design at this time. There does not BAUMGARTEN AT STRASSBOURG; PHOTOS BY A. D. exist, however, any strong similarity of design in any two of these gardens. Each garden in itself is quite different from the preceding. Water, statuary, and certain types of vegetation are the ever-present features; but the careful observer is always conscious of the guiding influence of a master hand that has by ceaseless study created something which, though bubbling with grandeur and elaborateness of detail, is fully in harmony with its specific location and with its surrounding landscape. This fact has always impressed the writer, namely, that in all of these celebrated villas, with few exceptions, the most careful thought and the best efforts of great artists and sculptors have been given to the general design of the garden and to the refined character of



the statuary throughout, often to the apparent sacrifice of many architectural details concerned with the building itself. The best talent in Europe was devoting itself to this work. Such exponents of the art as Bernini, Bramante, Bounalesci, Michael Angelo, and Vignola are associated with the best works of the high Renaissance. Can one then be surprised at the degree of perfection attained in even the very minor details?

The gardens of Italy, dependent first upon their design, are quite different from what many believe and picture them to be. These much-heralded old villas are not rich in their abundance of flowers; they are not virtual paradises on earth filled with vines and the beautiful flowering plants so common

to the American garden. They rather may be described as wonderfully ingenious designs enhanced with an abundance of running water and statuary, the whole framed with a simple but dignified planting of trees and shrubs. They are designed with the idea that they may be gardens to look into and to look out from. An excellent illustration of the former is the Villa Lante, and of the latter is the Villa D'Este overlooking the Campagna.

As the Renaissance reached its height at the close of the 16th and the beginning of the 17th centuries, the spirit of the gardening art changed very much. Gradually the influence of the Baroque period made itself felt, and the decline from the refined to the grotesque became very marked. An excellent example of this is seen in a careful study of the old Villa D'Este at Tivoli. Here at every turn the observer is confronted by these ambitious designs executed in plaster and stucco, and intended to convey the idea seen in the refined statuary of such gardens as those at the Villa Lante and the Boboli Palace. This tendency marked the rapid decline of the most fruitful period in the history of continental gardening, a period the influence of which has been felt, I might say, throughout the entire world. The gardens of these celebrated villas of Italy may be summarized in a few words:

1. The dominating influence is the presence of an admirably adapted de sign set off with a great variety of



BEAUTIFUL ENGLISH HAMLET AND PARK IN ONE CORNER OF THE TRIANON GARDENS AT VERSAILLES.

moving water used in different ways.

2. The topography of the country demanded comparatively small garden areas, which were so ingeniously designed on the different terrace levels



IN A CITY WHOSE EVERY AVAILABLE PARK SPACE IS FULLY APPRECIATED AND PRESERVED.

that the actual size of the garden was often over-estimated.

- 3. The presence of an abundance of statuary and interesting architectural features was the keynote of the garden.
- 4. A closely matted vegetation of Ilex, Myrtle, Cypress, Olives and Pines, together with many smaller shrubs, gave the dense shade which was required in this country of sunshine and intense heat.

It may seem that 1 am placing too much importance upon these gardens of Italy. I do not believe that the student of continental gardening can place too much stress upon the value of an intimate knowledge of the art as exemplified in Italy. These villas of Italy, moulded through design to a nicety, combine use and convenience with art for art's sake to a degree which is rarely seen in an American garden.

There is another type of continental gardening widely varying from its predecessors in this Italian country. This type is well illustrated by one excellent example, namely, the great Chateau of Versailles. I might also mention the Chateau Vaux, which, together with the foregoing, consummate two of the master pieces worked out under the guiding hand of the celebrated landscape artist, Le Notre. The last named chauteau is much less pretentious; but still equally as well worthy of careful study provided the time permitted. Ver-

sailles is the monument to the memory of King Louis the 14th and an emblem of his reign. A description of this wonderful park may give to us a clearer conception of the principles underlying the art in France, which are typical of the tendencies at the present day.

Here, unlike Italy, is a country of an entirely different character. It is a country with broad expanses of fertile lands marked by slight undulations admirably adapted to gardening on a scale of grandeur not to be seen in any other portion of the continent. King Louis the 14th established here, just outside the city of Paris, early in the 16th century, these gardens of Versailles, which consist of an immense park covering thousands of acres, elaborately laid out and completely finished in every respect. This great park was allowed, like other art creations of this kind, to slowly decay after the great ruler's death, until the time of the French revolution, when it was secured by the French government and preserved for the admiration of thousands of tourists every year. To describe adequately its interesting features would require a small volume; their number and their scale of grandeur can be but partially grasped from the photographs now extant. Their extent, refinement of design, and harmonious details can only be fully appreciated by personal contact. To stand on the main terrace above the great orangery and view in the distance the equestrian statue of King Louis, located at the end of the Swiss lake; to look again along the main alley over the fountains of Latona and of Apollo towards the grand canal; or perhaps over the series of pools to the fountain of Neptune, which is the crowning triumph of the gardens, at once fills the student's mind with an indescribable admiration for the master genius who conceived and carried to its realization this beautiful conception of art. On either side of this

main axis, terminated at either extreme by the main terrace and the grand canal, and among the heavy growth of beech and bass wood, are numerous small paths or alleys lined on either side with hedges of European beech. These alleys, radiating in various directions, focus at different intervals upon the many interesting fountains located at their intersections, and in turn upon the great Mirror lake, and the Colonnade, which is a large circular area surrounded by a series of marble columns supporting arches, under each of which is a marble basin. In the center of this great circle is a well-designed group of marble statuary known as the Rape of Proserpine. Beyond the Mirror lake the visitor comes upon the King's small, English park, and here in the midst of extreme formality is a pleasant bit of naturalistic gardening.

Leaving the great gardens of Versailles and approaching the Grand Trianon and the Petit Trianon there loom up before the visitor two other parks adjoining this main park of Versailles. These parks, though not as elaborate in their detail, are equally as interesting. In the extreme corner of the Petit Trianon gardens is the little English Hamlet and its unique bit of English gardening, all of which was carried out in accordance with the wishes of that unfortunate Queen Marie Antoinette, to have something restful and natural, savoring with the spirit of the English landscapes.

Versailles is the great garden which is typical of the French art, and the main characteristics may be summarized as follows:

- 1. Distinct formality with large areas devoted to Parterre work, all of which is closely clipped and edged to a nicety.
- 2. An elaborate display of fountains and marble statuary with broad expanses of water and formal pools.

Continued on Page XII



THE GARDEN OF VERSAILLES; LOOKING FROM THE MAIN TERRACE OVER THE GRAND CANAL,



NEW LEGISLATION FOR THE CARE OF CEMETERIES

There has recently been an almost simultaneous awakening in five states of the Central West and one in the East to the necessity of better care of cemeteries, manifested in the effort to get legislation for the purpose of legalizing the establishment of funds for care of cemetery lots. In many states incorporated cemetery associations, and in some cases even townships and county organizations, cannot legally hold funds for the perpetual care of lots. In Illinois, Indiana, Michigan, Minnesota, and Iowa, legislation has been introduced, and is now being considered by the legislatures for the purpose of legalizing the raising of funds for the care of cemetery lots. In New Hampshire, an act has just been passed.

In Illinois, a determined effort is being made to secure the passage of House bill No. 130, and every cemetery official and every citizen who is interested in the betterment of the condition of cemeteries should express definitely to his Representative and Senator his desire to have this measure passed. The same means should be used in the other states for the passage of the measures referred to here.

The Supreme Court of Illinois has held that in the absence of a specific statute it is unconstitutional for a cemetery association or company to receive bequests or money by will, in perpetual trust, for the perpetual care of cemetery lots, graves and monuments. In other words, no man has the legal right to provide for the care of his lot or the graves of his dead after the decease of the owner. Neither have they the legal right to provide for the keeping in repair of their monuments, vaults, and headstones. It seems almost impossible that such a condition could exist, and special enabling legislation is the first necessity toward securing a perpetual care fund.

There is a statute that permits county cemeteries to receive money in trust for this purpose, but most all such cemeteries are maintained by the counties for the burial of paupers only, and if the relatives or friends of the latter did not have enough money to pay for their burial they certainly will not be able to leave any for the care of their graves.

Section 5 of "An Act to protect cemeteries and to provide for their regulation and management," approved June 29, 1885, purports to authorize cemeteries to receive property, or the income of such property, for the purpose of "improvement, maintenance, repair preservation and ornamentation" of lots, etc., in cemeteries. This does not in terms authorize trusts in perpetuity for the purposes stated, and as a trust in perpetuity for the purposes stated would be void unless authorized by statute, it may be doubtful, if the question were raised, whether the statute as it now exists would be held to make valid such trust in perpetuity.

Another very serious objection to the law as it now stands, is that the provisions of the sections purporting to authorize trust funds do not appear to come within the title of the original act, and that, therefore, these amendments which have been tacked on from time to time are probably unconstitutional and void. The title of the original act is "An Act to protect cemeteries, and to provide for their regulation and management," and the first three sections provide against disorder, etc., in cemetery grounds, and authorize the board of directors of any cemetery society or association to make rules for the regulation of the grounds and conduct of persons therein, and for the appointment of policemen to protect such cemetery grounds. This seems to be all that is embodied in the title and what follows these sections relating to trust funds, etc., seems to be wholly outside of the title to the act, and if the question ever was brought before the Supreme Court it might be held that the provisions relating to trusts contained in the sections following the first referred to are void.

The bill designed to remedy this situation, is known as House Bill 130,

and has been introduced by Representative Swanson. It reads in full as follows:

A Bill for an Act to amend an Act entitled "An Act in relation to the conveyance, use and preservation of burial lots in cemeteries," approved April 21, 1899, in force July 1, 1899, by adding thereto a new section to be known as Section 2.

Section 1. Be it enacted by the People of the State of Illinois, represented in the General Assembly: That an Act entitled, "An Act in relation to the conveyance, use and preservation of burial lots in cemeteries," approved April 21, 1899, in force July 1, 1899, be and the same is hereby amended by adding thereto the following section, to be known as Section 2:

That every such company or as-Sec. 2. sociation incorporated for cemetery purposes under any general or special law of the State of Illinois may receive, by gift, devise, bequest, or otherwise, moneys or real or personal property, or the income or avails of such moneys or property, in trust, in perpetuity, for the perpetual and permanent improvement, maintenance, ornamentation, repair, care and preservation of any burial lot or grave, vault, tomb, or other such structures, in any cemetery owned or controlled by such cemetery company or association, upon such terms and in such manner as may be provided by the terms of such gift, devise, bequest, or other conveyance of such moneys or property in trust and assented to by such company or association, and subject to the rules and regulations of such company or association, and every such company or association owning or controlling any such cemetery may make contracts with the owner or owners or legal representatives of any lot, grave, vault, tomb, or other such structure in such cemetery, for the perpetual and permanent improvement, maintenance, ornamentation, care, preservation and repair of any such lot, grave, vault, tomb, or other structure in such cemetery owned or controlled by such cemetery company or association.

Abandoned cemeteries have received some attention from the Legislature of Indiana in House bill No. 332, passed by the last legislature of that state, which puts the care of abandoned cemeteries in the hands of township trustees, and requires the trustee to keep any such cemetery in a respectable condition by fencing when there is no fence, by keeping the fences in good repair, and keeping the weeds mowed," and to take care of all the public cemeteries in the township. The act of 1905 with relation to the care of public or private cemeteries is repealed.

In the case of Lounsbury vs. the Trustees of Square Lake Burial Association, the Supreme Court of Michigan held that a bequest in the will of Noah Tyler reading as follows, was void as creating a trust under the statute of perpetuities:

"I give and bequeath the sum of One Hundred Dollars to the Trustees of the Square Lake Cemetery In the Town of Orion, Oakland County and State of Michigan, as a perpetual fund to be kept at interest by sald trustees and the interest used to take care of the graves on my lot in sald cemetery and keep the said lot in order."

In passing on the Square Lake cemetery association case, the court expressed surprise that an heir should see fit to contest that clause of the will which aimed to provide that the grave of the deceased should always be kept green. A bill which has since been introduced in the Legislature proposes to extend to all legitimate cemetery associations the right to receive funds in perpetuity for that purpose, which would do away with the difficulty in the Square Lake case.

This is a point that had not before been raised. There is a state law against perpetuities, however, from which cemetery associations in general are not exempt, although a few have received attention by special legislation, among them Saginaw. That the matter has not come up before is indication of the unanimity of the acquiescence in the justice of such a plan, for heirs have not seen fit ordinarily to contest such provisions. Now that it has been shown, however, that cemetery associations have not the right to receive such bequests the proposed act of the legislature is promptly and naturally introduced. If any exemption is to be made to the law against perpetuities it would seem that it should be in such cases as this. There is a natural human desire to assure perpetual care of the graves of those who are near to us. A perpetual fund to assure this is the method that naturally suggests itself and that is the simplest way to attain the end sought. The right to receive funds for this purpose, properly safeguarded, should rest with every properly constituted cemetery association.

In Minnesota, Senate Bill No. 505, introduced by Senator Moonan, is aimed to give townships the right to create a permanent fund for the care of cemeteries. The bill provides that the supervisors of any township may require that any portion of the price of a lot may constitute a permanent fund and be deposited as provided in the act, and the interest be paid annually to the trustees of the cemetery to be expended in caring for and beautifying the lot. The fact that

such a bill has been introduced is an indication that there is a growing demand for improvement. The cemetery people of Minnesota should use every influence with their Senators and Representatives to get the bill passed. It has already passed the Senate and is on "General Orders" in the House, which means that is is likely to pass.

In Iowa, a measure has been introduced to provide that boards of directors of cemetery asociations or town or county officials where the cemetery is under public management may levy an annual tax of 21/2 mills on each square foot of lot for its care, where such fund has not been provided for by perpetual care. The bill is a fair measure and is aimed to cnable cemeteries to allow the sale of lots of non-residents or persons who have left the country or whose whereabouts are unknown. The bill has been introduced in the house by Representative D. E. Kulp of Palo Alto County as House Bill No. 357, and in the Senate by Senator L. E. Francis as Senate Bill No. 315. In the House the measure has been reported unfavorably from the Committee on Ways and Means. Representative Kulp writes us that it is very difficult to interest the Legislature in a measure of this character, which shows the necessity of every citizen of Iowa interested in the better care of cemeteries impressing his Representative

cessity of this legislation and of keeping it before each successive legislature, if it is not passed by the present body.

The New Hampshire Legislature has just passed a very simple, plainly worded act that seems to provide definitely for the matter of perpetual care, providing, of course, there are no constitutional stumbling blocks in the shape of laws against perpetuities such as the one referred to above in the state of Michigan. The New Hampshire law reads in full as follows:

AN ACT

To Allow Executors and Administrators to pay over Money for the Perpetual Care of Cemetery Lots.

Be it enacted by the Senate and House of Representatives in General Court convened: Section 1. Executors and administrators may pay, upon the order of the Judge of Probate, to cemetery corporations or to citles or towns having burial places therein, a reasonable sum of money for the perpetual care of the lot in which the body of their intestate is buried, and the monuments thereon. The Judge of Probate shall determine, after notice to all parties in interest, to whom the same shall be paid and the amount thereof, if any, and such sum shall be allowed in the accounts of such executor and administrator.

Sect. 2. This act shall take effect on its passage.

(Approved February 25, 1911.)

In the way of minor legislation, a bill is now before the Judiciary committee of the Minnesota legislature to permit private cemeteries to own 100 acres of land exempt from taxation instead of eighty as at present. for sale by several firms. The mate-

ASKED and ANSWERED

An exchange of experience on practical matters by our readers. You are invited to contribute questions and answers to this department.

Calcium Chloride as a Weed Killer

I notice in your "I Want to Know" column of last month an inquiry from a correspondent signed H. H. If your correspondent is a cemetery superintendent it is evident he did not attend the last convention of the Association of American Cemetery Superintendents. At this convention the use of chloride of calcium was thoroughly discussed and its merits as a weed killer and dust layer were brought out. This is a striking illustration of the value of the conventions of our association. Those cemetery superintendents who are now members but did not attend the meeting get the benefit of this discussion from the printed report now in press.

Presuming your correspondent is not a member of the association, and for his information I will state that chloride of calcium is a chemical by-product and is and Senator with the value and nerial comes in metal drums of 375 lbs. each and costs about \$17.00 per ton. It is in granulated form and should be placed on the road in dry form as soon as the drums are opened. If it is to be used on a road as a weed killer only, less material is required than where it is to be used as a dust layer. As soon as the chloride is exposed to the air it begins to draw moisture and dissolve, and after one night's dew it is not discernible except that the road appears as if recently sprinkled.

As to how far the material will go will depend on how thick it is applied. In some instances it is as low as 2 cents per square yard applied, while in others it will go as high as 8 cents. It can be applied at any time during the spring or summer.

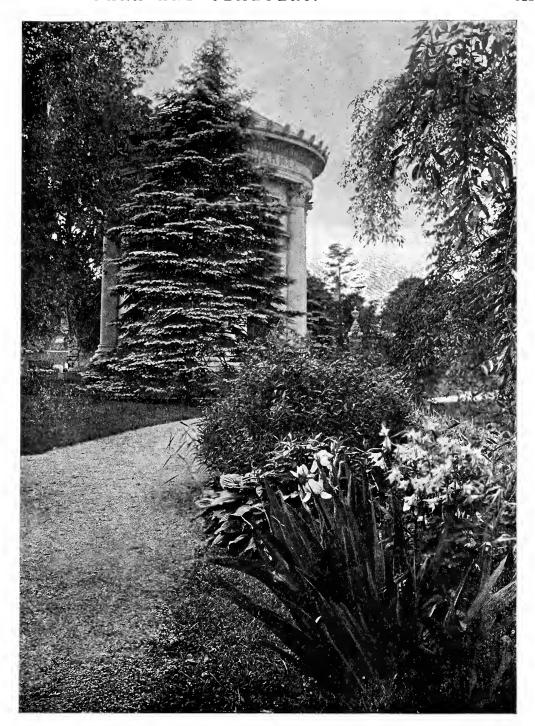
Bellett Lawson, Jr., Sec. Assn. of American Cemetery Supts. River Grove, Ill.

FRAMING THE MAUSO-LEUM INTO THE LAND-SCAPE

Nowhere is there more varied more constant opportunity for the exercise of the fine landscape art of hiding things than in the modern cemetery, and in no cemeteries has this art been more successfully practiced than in Woodlawn in New York, and Allegheny in Pittsburg. We showed last month some examples of landscape pictures from Allegheny Cemetery that illustrated the skilful development of landscape pictures and the setting off of tall monuments.

The pictures shown here from the Allegheny Cemetery book and the book just issued by Woodlawn Cemetery, of New York, from which have shown some fine examples in other years. This year's book has been divided into two sections, to vary its present-

ment of pictorial effects, by the illustration of some photogravures. The photogravure book is smaller than its companion brochure showing the half tones and the pictures have been selected with care, and a discriminating eye to their appropriate rendering in the soft, delicate, effects for which this form of illustration is particularly fitted. Both books are executed in the same high qualities of illustration and original typographic effects as previous issues, which have been noticed in these pages.



LANDSCAPE PICTURE IN WOODLAWN CEMETERY, NEW YORK.

The pictures selected this month, are chosen particularly to illustrate the difficult problem of giving land-scape setting to mausoleums. The planting of a large lot containing a mausoleum is a landscape problem of no mean proportions. It involves the designing of a scheme of planting and lay out of scarcely less importance than that of planning for the surroundings of a residence, with its accompanying lawn. The problem in the case of the mausoleum is additionally complicated by the necessity

of considering not only the lot itself but its relation to all of that portion of the cemetery in its immediate vicinity. The task of blending the generally sharp and severely classic lines of the structure with an informal landscape demands the highest skill of the landscape gardener in the selection of trees and shrubs and in their placing and care. How successfully such structures may be made a part of the landscape picture is admirably illustrated in the three pictures shown here.

The determined effort on the part of Superintendent Falconer to give every prominent monument and lot in Allegheny a framework or setting of vegetation is well shown in the view of the Moorehead lot and mausoleum on page 524. The circular massive lines of the mausoleum are everywhere emphasized in the landscape picture. Even the low rolling, heavily wooded hills in the background seem to have been designed to contribute to the effect. The circular lot, the stone wall outlining it, and the massive broad-spreading tree at the left are all woven into the picture. The trailing vines on the building, and the vines and low shrubjudiciously bery placed on the enclosing wall, relieve the color of the stone work and blend it with the green of the landscape to make a picture of rare charm. Lot enclosures of all kinds have been abolished in Alleghany, and are rapidly being removed, but this one, placed in the early days, is so well treated and so well harmonized with the

structure itself that one is not sorry it has been left as a rare example of how a lot enclosure designed to harmonize with its memorial, may be not unsightly when it has plenty of room and is artistically treated by both the designer of the monument and the landscape architect.

How well the formal lines of the evergreen trees and shrubs serve to effect the transition between the classic architectural lines of mausoleums, and the naturalistic landscape about them and blend the refined



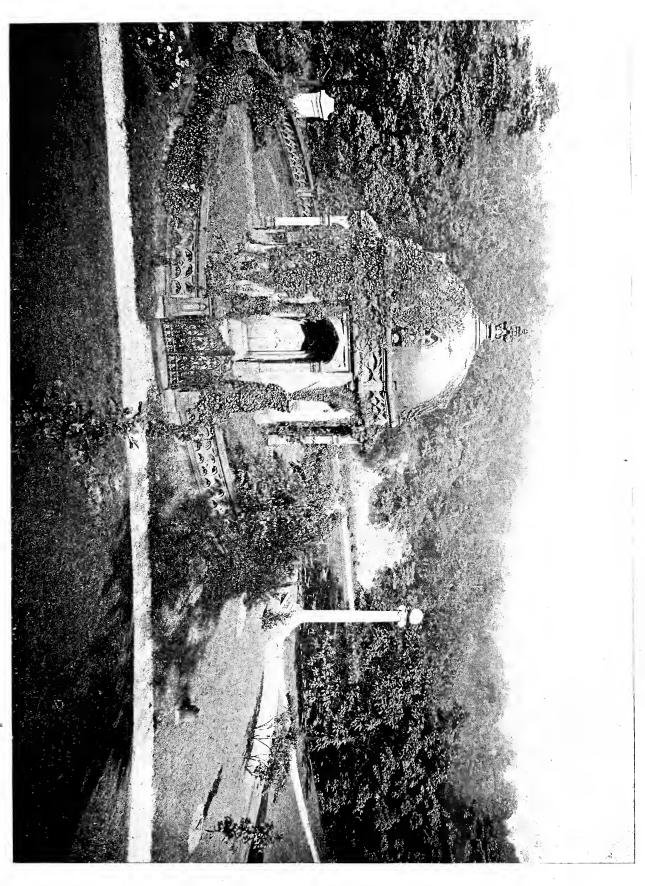
PLANTING TO SET OFF A MAUSOLEUM, WOODLAWN CEMETERY, NEW YORK.

architectural mass with the naturalistic lawn to make a harmonious picture, may be seen in the two views from the Woodlawn Cemetery book. These also show structures in which the prevailing general style is that of circular vaults of highly finished architecture. The Warner mausoleum, shown in a view that is effectively chosen for its pictorial value, is almost hidden by a tall conifer, whose low growing branches with their broad horizontal lines, merge the vertical lines of the building into

the horizontal plane of the lawn. The walk, disappearing at the front and the right center, balances well with the touch of open sky in the distance, and is picturesquely broken in front by the planting in the corner of the picture.

The domed roof of the other mausoleum is so fittingly related to the planting in the foreground that the rest of the structure is entirely lost sight of. The graceful conical lines of the trees seem to carry the lines of

(Concluded on page X)



COURT ON RIGHTS OF HEIRS TO CEMETERY LOT

According to the Tennessee Supreme Court in the case of Robertson et. al. vs. Mt. Olivet Cemetery Co. et. al., where testator's executors purchased a lot in a cemetery for the interment of testator and the members of the family, receiving a mere certificate of purchase from the cemetery association for the benefit of the estate, the legal title remaining in the association, no title to the lot passed to the testator's wife under his will, bequeathing to her a one-sixth interest in his estate, which could pass on her death to her children by a former husband. Judge C. J. Beard in rendering his decision, reviews the case as follows: The defendant, the Mt. Olivet Cemetery Co., is a corporation organized under the laws of this state for the purpose of acquiring, opening up, and beautifying property for cemetery purposes, and acting under its charter it acquired a tract of land in the neighborhood of the city of Nashville. and divided the same into lots suitable for the interment of bodies. In the year 1851 ex-Gov. Aaron V. Brown died, leaving a will in which he divided his estate between Cynthia H. Brown, his wife, and five children, four of whom were born to him by a prior marriage, the fifth and youngest being the issue of the marriage with his second wife, afterwards his widow. Subsequent to his death one - Dortch, who had qualified as his executor purchased a lot in Mt. Olivet Cemetery, taking from its trustees a certificate of purchase indicating that it was for the benefit "of the estate of Aaron V. Brown." Upon this lot were from time to time buried the bodies of Governor Brown and a number of his children and grandchildren, who died at later dates, and also that of Cynthia H. Brown, his widow. A number of years prior to the filing of the present bill the heirs of Governor Brown, believing the lot, as originally laid off, unnecessarily large, with the consent of the trustees of the cemetery. subdivided it and made sales of certain of these subdivisions which were unoccupied by the bodies of the family to strangers in blood.

Mrs. Cynthia H. Brown, at the time of her marriage to Governor Brown, was a widow. By her first marriage she had two children, J. E. and Narcissa P. Sanders, who are made defendants to the present bill. These parties assuming, in the right of their mother, who under the will of Governor Brown was entitled to one-sixth of the estate, that they had a one-sixth interest in the burial lot as originally laid off, sold to the defend-

ants, Marshall and wife, one of these subdivisions, this being done with the consent of the trustees in charge of the cemetery. These purchasers, claiming title by virtue of this sale, were preparing to erect a vault on this lot when the present bill was filed by the complainants, who are the children and grandchildren of Governor Brown, impeaching this sale and asking that the conveyance from the two Sanders to Marshall and wife be held as a cloud upon their interest, and that the vendees be perpetually enjoined from interfering with this property.

The chancellor dismissed the bill upon the ground that relief was asked with regard to property, or an interest in property, peculiar in its character and over which a court of equity could not exercise control; on appeal, however, the Court of Chancery Appeals has set aside that decree and has granted the relief prayed for in so far as it enjoins the Marshalls from, in any wise, exercising control over or ownership in this property. We are asked by the defendants to review this last decree.

As has been stated, at the time of the purchase of the original lot by the executor Dortch, the trustees of the cemetery instead of making a deed, simply issued a certificate showing that this purchase was for the benefit of the estate of Governor Brown. Thus the legal title to the property was left in the corporation where it remains to this day. Thus it has been understood by all parties the corporation exercised a dominant control over this lot is indicated by the fact that in the subdivision that was made of the original purchase, and of the sales from that subdivision by the children and grandchildren of Governor Brown, as also in the attempted sale of the Sanders to the Marshalls, its consent to such change of interest was deemed necessary and accordingly was obtained.

So it is that all the parties evidently regarded that property in a cemetery lot was peculiar in character, and lacked some, if not many, of the elements found in other property, real and personal. That such an interest is peculiar, we think is the result of the holding of well-considered cases. In the petition of Emaline A. Waldron et al., a case decided by the Supreme Court of Rhode Island, in March, 1904, reported in 58 Atl. 453, 67 L. R. A. 118, 106 Am. St. Rep. 688, it was held that a residuary devise in general terms to a testator's widow would not, as against his children, pass title to a burial lot upon which members of the testator's family

were buried. In an earlier case, that of Gardner vs. Swan Point, 20 R. I. 646, 40 Atl. 871, 78 Am. St. Rep. 897, where a widow claimed title to a burial lot as a residuary legatee, it was said by the court that in the cases "of churchyards and cemeteries it had been held that, though a deed may run to a grantee, his heirs and assignees, he takes only an easement or right of burial rather than an absolute title. So long as the land is used for burial purposes he cannot exercise the same right of ownership as in other real estate." In Derby vs. Derby, 4 R. I. 414, by the will of the testator the executor was empowered to sell all the real estate to pay pecuniary and residuary legacies, and the question arose whether he should sell a lot in the cemetery where the testator's first wife was buried. The court said: "This lot was purchased by the testator for a burial place for his family. That he should deliberately intend that it should be sold and go into the hands of strangers it is difficult to believe without the most express direction. It is the more difficult in this case as within it are deposited the remains of his former wife, and could he intend that these remains should be disturbed? He had devoted this lot to pious and charitable use as a place of burial for members of his family. Did he mean to revoke it? It could not have been in the contemplation of the testator that this lot should be sold out of his family, nor could he have contemplated it as property in any such sense as to fall within the power given to the executor, and with an express direction to sell this particular lot we think we shall not be warranted in advising the executor to sell it."

In Roanoke Cemetery Co. vs. Goodwin, 101 Va. 605, 44 S. E. 769, this peculiar nature of an interest in a cemetery lot and of the relation of a purchaser thereto are equally recognized. It was there held that the purchaser acquired no absolute interest or dominion over such lot, but merely a qualified and usufructory right for the purposes to which the lots were devoted and for which they were set apart by the company; that their holding was in the nature of an easement with the exclusive right to bury in the lots subject to the general proprietorship and control of the association. To the same effect are Hook vs. Joyce, 94 Ky. 450, 22 S. W. 651, 21 L. R. A. 96; McWhirter vs. Newell, 200 III. 583, 66 N. E. 345.

Other courts have declined to recognize the right of a lot holder in a cem-

etery even as rising to the dignity of an easement. In Kincaid's Appeal, 66 Pa. 411, 5 Am. Rep. 377, Page vs. Symonds, 63 N. H. 17, 56 Am. Rep. 481, Partridge vs. First Independent Church, 39 Md. 631, and Dwenger vs. Geary, 113 Ind. 106, 14 N. E. 903, such a right is treated as something in the nature of a license—a mere right of burial.

A very extensive and learned note to the case of Waldron's Petition, supra, will be found in 67 L. R. A. These cases and many others are collated and commented upon. The reason which controls, whether expressly stated or only by inference to be found in the opinions delivered by the various courts, is possibly as well expressed by the Supreme Court of Rhode Island in the case first referred to as elsewhere. In that case, as has been stated, it was held that a burial lot did not pass under a general residuary devise, but descended to the heirs as intestate property. Said the court: "It is a family burial lot. It is that fact alone which gives a peculiar limitation to its tenure. The heir takes subject to all the conditions for which the ancestor held it. A sort of trust attaches to the land for the benefit of the family. Neither the widow nor the child can be excluded from it for want of title, yet such a result might follow if the tenure was like that of other real estate."

We are satisfied that these holdings are sound, and that if this lot purchased by the executor had been acquired by the testator himself in his lifetime, it would not have passed under his will dividing in general terms his estate between his widow and his children, but that as in a case of intestacy, it would have gone to his heirs, as a place of sepulture for Governor Brown and his widow, and those who were of Governor Brown's blood; and that the defendants, J. E. and Narcisa Sanders, would not have acquired even an ease-

(Concluded on page VIII)

CEMETERY NOTES

Among the acts passed by the Sixty-First Congress was one requiring the Federal government to take over and maintain the Confederate Cemetery at Springfield, Mo.

The Texas legislature has appropriated \$2,000 for the purpose of erecting a monument to the memory of Mrs. Elizabeth Crockett, who is buried in Acton Cemetery, Hood Co., Texas.

It is announced that the mausoleum to be erected in Riverview Cemetery, South Bend, Ind., will be one of the finest in the state. Considerable improvement in the avenues is to be carried out this year.

Last month Governor Dix, of New York state, exercised for the first time his veto power and disapproved the bill of Assemblyman Miller, authorizing the Maple Grove Cemetery Association, of Worcester, Otsego county, to accept a gift of at least \$1,000 in trust, to use the income for the care and improvement of a certain private burial lot. The governor says the bill is unnecessary special legislation.

In addition to re-electing the old board of managers, the Fairmount Cemetery, Newark, N. J., lot owners have ruled a second time against the admission of automobiles into the grounds.

The old Masonic Cemetery of forty acres in the heart of San Francisco, Cal., extending along Turk street, from Parker avenue to Masonic avenue, is to be sold for building lots and the bodies of numbers of pioneer San Franciscans are to be removed at once to a new burial ground of the order across the San Mateo line. It may be that within a year the cemetery will become a residential district, with broad streets. This project is revealed in a petition filed with the Superior Court recently wherein the Masonic Cemetery Association asks permission to sell the property.

The citizens of Redwood City, Cal., are stirred to action over the vandalism and desecration perpetrated in Union Cemetery, where many of the state's leading pioneers rest. The official attention of the town trustees and the Woman's Club have been called to these conditions.

The City Treasurer of Norfolk, Va., has paid over to the Calvary Cemetery Annex Corporation \$15,510.54 of the purchase money of the Calvary Cemetery annex, the purchase of which, for colored cemetery purposes, was recently authorized by the Norfolk City Council, after a long drawn out fight over the deal.

The Confederate veterans of Mis-

souri are generally much elated over the passage of the law providing for the care of the Confederate Cemetery at Springfield, Mo.

John D. Rockefeller, Jr., has bought of the Lake View Cemetery Association, Cleveland, O., five acres of their land having a frontage of 1,100 feet on Superior avenue, for the purpose of improving Superior avenue at that point. The price is said to have been between \$12,000 and \$15,000. This is a gift to East Cleveland.

An era of cemetery vandalism seems to be opening up again. On the night of March 4 the safe of the Bloomington Cemetery Association, Bloomington, Ill., was blown open and a small amount of cash was taken. Mr. A. J. Graves, the superintendent, reports a curious incident as follows: "On returning from lunch I found on the porch of our lodge this letter: 'Mr. A. J. Graves: Please arrange to have me put in my grave. You will find me on my lot. Enclosed check to pay expenses, to have me put in grave and to take care of my grave (\$150.00), the other check (\$25.00) please to give to Salvation Army. Chris. G. Friedrich.' I went at once to the lot expecting to find a subject for interment, but we could not find any trace of the man; he came to the cemetery at 11:30, went to his lot and then disappeared. Police were notified and watch was kept the balance of the day, but nothing was heard of him and no one was found who knew him. "Next day at 5 a. m. the report of a revolver was heard and at 6 o'clock he was found dead. We used \$75.00 for funeral expenses and \$75.00 for perpetual care of lot."

Relocation of the Congressional Cemetery outside of the city limits of Washington, D. C., is again being agitated by the East Washington Citizens' Association. It is again broached after a lapse of twenty years. A resolution was passed urging that no more burials be made and that it be ultimately abandoned.

The suit of the Union Cemetery Association to enjoin Kansas City against stopping burials in its grounds has been heard by Judge O. A. Lucas of the Circuit Court. The cemetery claims perpetual life under its charter and, as a burial ground, pays no taxes. Shocking conditions are claimed on the part of the city.

A fire, caused through the burning of stubble on a neighboring farm, did considerable damage in the Muscatine Island Cemetery, Muscatine, Ia. It burned a path 150 ft. wide through the cemetery, destroying the trees in its path and leaving a strip of ashes and destruction in its wake.

The Board of Regents of Fairview Cemetery, Louisville, Ky., has recently purchased certain adjoining property as an addition to the cemetery and will immediately grade and improve it.

A wrangle which has been in progress for some years over the way in which the affairs of Pine Grove Cemetery, Boylston, Mass., should be conducted, under existing town by-laws, has resulted in the proposed resignation of trustees Oliver M. Ball and Nathaniel L. Kendall. It is evident that reform in the cemetery management and reasonable regulations to be uniformly maintained are greatly needed.

The proposed chapel in Pine Hill Cemetery, Dover, N. H., provided for in a bequest by the late Mrs. Ricker, is held up owing to the position taken by the executor, Mr. Frank F. Fernald, and what appears to be the unreasonable conditions of the bequest. Mr. Fernald seems to claim, under the will, supreme control of both the cemetery's interests and the late Mrs. Ricker's interests, which so far as the cemetery is concerned, the trustees will not submit to.

In order to provide for the reinterment of the bodies taken from the Sandy Hill Cemeteries, Paterson, N. J., the city has purchased a lot, 200 ft. by 100 ft., in Laurel Grove Cemetery, at a cost of \$6,250, with the privilege of buying more should the area prove not large enough.

Much indignation is naturally felt by the members of the Hillside Cemetery Association, Anniston, Ala., over the recent desecration of a number of the best monuments on the north side of the cemetery. It is laid to the vandalism of unruly boys, who when arrested will be dealt with severely.

Through the park commissioners the city of Fall River, Mass., has purchased from Zilpha E. Downing, a lot of land on Oak Grove avenue, containing 112.85 square rods, for \$1,500. This land will be used for cemetery purposes and adjoins another piece of land which was purchased last year for the same purpose.

A grass fire broke out in the old Root street cemetery, Aurora, Ill., recently, and for some time the flames threatened to spread to houses and barns in the neighborhood. The fire department was called, but in less than five minutes after the alarm was turned in the entire cemetery was ablaze. It was extinguished before any buildings were reached.

Community mausoleums are in contemplation for Milwaukee, Wis., Columbia City, Ind., Crown Point, Ind., Mt. Gilead, O., Delaware, O., Lima, O., Bucyrus, O., Cleveland, O., Richmond, Va.

CEMETERY IMPROVEMENTS

Following the trend of Howard Evarts Weed's recent address on landscape architecture in that town, the Toppenish, Wash., Commercial Club has authorized the securing of an option on a tract of 80 acres near the city to be used for a cemetery, 10 acres to be beautified.

Work has been commenced on improvements in the new portion of Elmwood Cemetery, Lorain, O. Means will be provided by which, with nominal expense, lots may be watered at all times necessary.

The contract has been let for a concrete fence to be built around Fairlawn Cemetery, Oklahoma City, Okla. The fence will be 5 ft. in height, with two iron and concrete gateways. The total length of the fence when finally completed will be 5,800 ft., and its cost \$16,000.

Connersville, Ind., is to have a new cemetery through the generosity of Manfred E. Dale, vice-president of the Fayette National Bank of that city. Mr. Dale recently consummated the purchase of the Conwell Merrell farm of 66 acres just west of the city. A cemetery association is being organized to take over the property, which will be named the Dale Cemctery Association, which will operate not for profit, but for the benefit of the cemetery itself. The work of improvement will soon be commenced.

Connellsville, Pa., is awakening to the fact of the poor condition of its local cemeteries, for under public criticism the managements of both Hill Grove and Chestnut Hill cemeteries are preparing to take positive action, and considerable expenditures will be made this coming season. The owners will also be called upon to fulfill their obligations to their lots.

FROM ANNUAL REPORTS

The annual report of the trustees of Oakland Cemetery Association, St. Paul, Minn., for the year ending Oct. 31, 1910, shows total receipts of \$64,981.62. This includes a balance from last year of \$10,308.54; sales of lots, \$15,747; single graves, \$1,905; miscellaneous labor on foundations, etc., \$4,112.90, and green house sales,

\$7,592.60. Among the expenditures, which in all amounted to \$64,977.22, was green house construction, \$26,-The pay rolls amounted to 770.48. \$24,868.65. The superintendent's report shows that 108 lots were sold, also 20 select double graves and 146 single graves. There are 54.17 acres still unsold. The total number of interments to October 31, 1910, now amounts to 18,251. Considerable improvement was made on the grounds during the year, including the new green house and building. A waiting and public comfort building near the Cortland street entrance is begun.

As disclosed by its Annual, Lakewood Cemetery, Lake City, Minn., held its annual meeting on March 2 and elected its officers and trustees. While its receipts and expenditures only amount to between \$3,000 and \$4,000 per annum, its management has shown a decidedly progressive spirit and keeps its lot owners posted on what keeping up the condition of the cemetery means. Its perpetual care and special care fund now amounts to \$13,294.80. Its annual always contains some good suggestions to its lot owners, and we note that in the future no slighting of foundations will be permitted,

The report of the Board of Trustees of Beech Grove Cemetery, Muncie, Ind., to the city council for the year ending December 31, 1910, showed receipts for the year of \$16,796.36, which included an appropriation of \$5,000; sales of lots, \$3,580; interment fees, \$1,767; foundations, \$983.59, and care of lots, \$1,727.25.

TO THE MEMBERS OF THE A. A. C. S.

After much delay the report of the proceedings of the Chattanooga convention is out of the printer's hands and is now being mailed to members of the association.

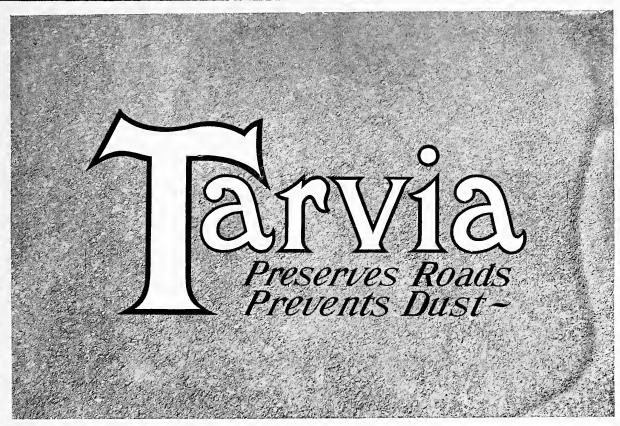
Bellett Lawson, Jr., Secy.-Treas.

PERSONAL

The Cemetery Committee of Clinton, Mass., has re-appointed Mr. L. H. Parker superintendent of the cemetery for the current year.

The cemetery commissioners of Waltham, Mass., have again chosen Mr. Theodore Mansfield superintendent of cemeteries.

The new cemetery commission of Racine, Wis., held its first meeting last month, organized and elected officers. After discussing the question of superintendent, it appointed for one year Mr. Louis F. Mohr, who has held the position under two different city administrations.



THE WELL-BOUNDED SURFACE OF A TARVIATED ROAD PHOTOGRAPHED AT CLOSE RANGE

A Foreign Opinion

"That it is becoming a generally accepted opinion that tar in some form or other is destined to play an important part in the road construction of the future is undoubted.

"Apart from its comparative dustlessness—the essential and most important characteristic in respect of which it holds an advantage over an ordinary macadam—it is now practically reduced to an axiom that a tar-bound macadam road has enormous advantages over an ordinary macadam road in the following respects:

"Economy of maintenance, through its ability to better withstand agents of road destruction, both tractive and climatic; economy of scavenging and watering; a flatter permissible camber; noiselessness and hygienic advantages."

Thus writes F. Walker Smith, City Engineer of Edinburgh, Scotland, in the Engineering News

for September 22nd. Other leading engineers and the engineers of France support this opinion as did also the International Road Congress at Brussels.

The above reference to "tar" does not mean ordinary crude tar from the gas works, but presumes that the tar has been properly prepared for road use.

Tarvia is the only tar that has been widely used on American roads and the only one that has become standard in engineering practice. Tarvia acts as a binder, filling all voids in the stone and holding it firmly in a tough, waterproof, elastic matrix.

"Tarvia B" is applied cold for dust-laying purposes principally. "Tarvia A" is a heavier grade, requiring heating before use and is used in thorough surface work. "Tarvia X" is used in road construction. Booklet on request.

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TOPICAL INDEX to OUTDOOR LITERATURE

An Index to articles on Gardening, Forestry, Park, Cemetery and Civic Improvement and kindred subjects in leading general and special magazines

Subscriptions will be received for any magazine or periodical at club rates with Park an Cemetery. Publications in which articles appear are listed below, and referred to by abbreviations, thus: S. L. 8:67.8, Feb. 09, means: Suburban Life. vol. 8, pages 67.8, February, 1909, Single copies should be ordered direct from the publications at addresses given below.

PUBLICATIONS INDEXED AND ABBREVIATIONS USED.

PUBLICATIONS INDEXED A
American Botanist, Joliet, Ill. (A. B.),
15c year; 20c copy.
American City. The, (Am. C.), New
York, \$1.00 year; 10c copy.
American Florist, Chicago (A. F.), \$1.00
year; 5c copy.
American Homes and Gardens, New
York (A. H. G.), \$3.00 year; 25c copy.
Architectural Record, New York (Arch.
Rec.), \$3.00 year; 25c copy.
Art and Progress (A. & P.), Washington, D. C.; \$1.50 yr.; single copy 15c.
Beautiful Homes (B. H.), St. Louis,
\$1.00 year; 10c copy.
Canadian Florist, The, Peterboro, Ont.,
Can. (C. F.), \$1.00 year; 10c copy.
Canadian Municipal Journal, Montreal
(C. M. J.), \$1.00 year; 10c copy.
City Hall, The, Des Moines, Ia. (C. H.),
\$2.00 year; 20c copy.
Conservation, Washington, D. C. (Cons.),
\$1.00 year; 10c copy.
Country Life in America, New York
City (C. L. A.), \$3.00 year; single copy,
25c.
Country Gentleman, Albany, N. Y. (C.

City (C. L. A.), \$3.00 year; single copy, 25c.
Country Gentleman, Albany, N. Y. (C. G.), \$1.50 year; 20c copy.
Century Magazine, New York City (Cent.), \$3.00 year; 35c copy.
Survey, The, New York City (Sur.), \$2.00 year; 10c copy.
Chautauquan, The, Chautauqua, N. Y. (Chaut.), \$2.00 year; 25c copy.
Craftsman, The, New York City (Cr.), \$3.00 year; 25c copy.
Embaimers' Monthly, Chicago (E. M.).

Embalmers' Monthly, Chicago (E. M.), \$1.00 year; 10c copy.
Fern Bulletin, Joliet, Ill. (F. B.), 75c

Fern Bulletin, Joliet, Ill. (F. B.), 75c year; 20c copy.
Florists' Exchange, New York City (F. E.), \$1.00 year; single copy, 5c.
Florists' Review, Chicago (F. R.), \$1.00

Florists' Review, Chicago (F. R.), \$1.00 year; 5c copy.
Forest Leaves, Philadelphia, Pa. (For. L.), \$1.00 year; single copy, 10c.
Fruit Grower (F. G.), St. Joseph, Mo., \$1.00 a year; 10c copy.
Gardener's Chronicle of America, Jersey

Civic Improvements, Home Grounds

A Country Home in the City. Illust. G. C. A., 12:147-8. March, '11.

Beautifying the American Grounds, E. W., Gage. Illust. G. C. A., 12:135-9. March, '11.

Country and Long Life. Cr., 19:485-8. Feb., '11.

Compulsory Playgrounds, W. E. Harmon. Sur., 25:822-3. Feb. 18, '11.

How to Plant Your Home Grounds, W. Miller. Illust. G. M., 13:154-6. April,

Long Island's Beautiful Homes. Illust. G. C. A., 12:143-6. March, '11.

Moorestown's Flower Day, W. L. Hood. Illust. S. L., 12:270. April, '11.

Originator of the Des Moines Plan. Hampton, New York, 26:248-50. Feb.

Pittsburgh City Plan, Thoroughfares, Civic Center and Water Front, F. L. Olmsted. Maps. Illust. Sur., 25:733-53. Feb. 4, '11.

Pittsburgh Street Plan, C. M. Robinson. Sur., 25:728-30. Feb. 4, '11.

Play-Day for a County, Fred H. Doeden. Illust. S. L., 12:256. April, '11.

D ABBREVIATIONS USED.

City, N. J. (G. C. A.), \$1.00 year; single copy, 10c.

Garden Magazine, New York City (G. M.), \$1.00 year; single copy, 15c.

Gardening, Chicago (Gard.), \$2.00 year; single copy, 10c.

Gartenkunst, die, Frankfurt, Germany (German), G. K., \$4.00 year; 50c copy.

Good Roads Magazine, New York (G. R. M.), \$1.00 year; single copy. 10c.

Horticulture, Boston (Hort.), \$1.00 year; single copy 5c.

House Beautiful (H. B.), Chicago: \$3.00

single copy 5c.
House Beautiful (H. B.), Chicago; \$3.00

House Beautiful (H. B.), Chicago; \$3.00 year; 25c copy.
House and Garden, Philadelphia (H. G.), \$5.00 year; 50c copy.
Independent, The, New York (Ind.), \$3.00 year; 25c copy.
Landscape Architecture (L. A.), Harrisburg, Pa.; \$2.00 year; 50c copy.
Meehan's Garden Bulletin, Germantown, Philadelphia (M. G. B.) 50c year; 5c copy.

town, Philadelphia (M. G. B.) 50c year; 5c copy.

Minnesota Horticulturist, Minneapolis (M. H.), \$1.00 year; single copy, 10c.

Moeller's Deutsche Gaertner-Zeitung, Erfurt, Germany, (German), M. D. G., \$3.00 year; 10c copv.

Municipal Engineering, Indianapolis, Ind. (M. E.), \$3.00 year; single copy, 25c.

Municipal Journal and Engineer, New York (M. J. E.), \$3.00 year; single copy, 25c.

York (M. J. E.), \$3.00 year; single copy, 25c.
Monumental News, Chicago (M. N.), \$1.00 year; single copy, 10c.
National Nurseryman, Rochester, N. Y. (N. N.), \$1.00 year; single copy, 10c.
Pacific Municipalities, San Francisco (P. M.), \$1.00 year; 10c copy.
Revue Horticole, Paris (Rev. Hort.), French, \$4.50 year; 50c copy.
Scientific American, New York (Sci. Am.), \$3.00 year; 10c copy.
Suburban Life, New York (S. L.), \$3.00 year; 25c copy.

year; 25c copy. Survey, New York (Sur.), \$2.00 year; 10c copy.
Woodland and Roadside, Boston (W. R.),
50c year; single copy, 10c.

The Williamsport Way, Geo. H. Young. Illust. Am. C., 4:101-5. March, '11. Town Promotion and City Planning, E.

S. Batterson. Am. C., 4:119-20. March, '11.

Value of Country Life and Animal Pets for Children, E. Parker. Illust. Cr., 19:588-93. March, '11.

Why Back to the Farm? Cr., 19:522-4. Feb., '11.

Will Commission Government Succeed in Large Cities? R. S. Childs. Am. C., 4:79-82. Feb., '11.

Gardens and Landscape Gardening

Balance in the Flower Gardens, Mrs. F. King. Illust. G. M., 13:164-5. April, '11.

Salem's Garden Contest, Miriam A. Tighc. Illust. Am. C., 4:109-11. March, '11.

School Gardens, Henrietta W. Livermore. Illust. Am. C., 4:111-14. March, '11.

Successful American Gardens, W. Miller. Illust. C. L. A., 17. April, May, Oct., '10; Jan., March, '11.

Unique Ways of Using Turf in the

Gardens, B. C. Maercklein. Illust. C. L. A., 19:361-2. March 1, '11.

Woman's Two-Year-Old Hardy Garden from Seeds, A. Thomson. Illust. A. H. G., 8:83-5. March, '11.

Parks, Cemeteries and Public Grounds

Asphalt Macadam Roadways, Thos. M. Roche. G. R. M., 12:112-3. March, '11. Bitumens and Their Essential Constituents for Road Construction and Maintenance, P. Hubbard. G. R. M., 12:94-8. March, '11.

Construction and Care of Earth Roads, Geo. W. Cooley. G. R. M., 12:90-3. March, '11.

Competitive Designs for Ruedesheim Park in Berlin, F. Zahn. Illust. (German.) G. K., 13:45-52. March, '11.

Description of Competitive Designs for Ruedesheim Park in Berlin, W. Blumberger. Illust. (German.) M. D. G., 26:109-12. Feb. 25, Mch. 4, Mch. 11, 1911.

"Meadow Roads" as Constructed in Southern New Jersey Counties, E. D. G. R. M., 12:102-3. Rightmire. March, '11.

New Successful Experiments in Automobile Road Making, L. W. Page. Illust. C. L. A., 19 sup. 276. Feb. 1, '11.

Ornamental Concrete, F. A. Morris. Illust. Sci. Am., 104:284. March 18,

The Relation Between Modern Traffic and the Alignment and Profile in Highway Design, H. B. Drowne. G. R. M., 12:115-6. March, '11.

The Problem of Waterproofing, R. C. Davison. Illust. Sci. Am., 104:273. March 18, '11.

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Trees, Shrubs, Plants, etc.

Chief Ornamental Plants of Tropical Florida, W. Miller. Illust. C. L. A., 19:408. March 1, '11.

Cover Crops; Fertilizers as Well as Preservers of Existing Fertility, H. B. Fullerton. Cr., 19:498-501. Feb., '11. Cultivation of Plants and Shrubs, Mrs.

Am. C., 4:128-31. H. Ferguson. March, '11.

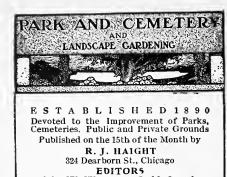
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Effects of Forestry on Climate, F. Laensch. Sci. Am., 71:94. Feb. 11, '11. Forest Fires in No. America-A Ger-





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views, New York, 43:363-4. March, '11. Fertilizers for Florists. F. R., 27:20.

March 23, '11. Flower Preservation. Illust. A. H. G.,

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Gladiolus Notes, L. Merton Gage. Illust.
A. F. 36:348. March 18, '11.

Greenhouse Construction and Heating, J. A. Payne. Illust. F. E., 31. March 11-25, '11.

How a Tree Tells Its Age. Illust. C. L. A., 19:332. Feb. 15, '11.

Leaf Markings of Plants, J. H. Shaffner. A. B., 17:5-10. Feb., '11.

Making the Greenhouse Work in Summer, H. S. Adams. Illust. C. L. A., 19:341-4. March 1, '11.

Museum of Living Trees, Arnold Arboretum. Illust. World's Work, Garden City, N. Y., 21:14147-58. March, '11.

New Roses Worth Growing, S. W. Crowell. F. R., 27:14. March 23, '11. New Regulations Regarding the Destructive Insects and Pests Act. C. F., 6:47. March 24, '11.

Notes on Spring and Summer Bedding Plants. E. F. Collins. Illust. C. F., 6:45. March 24, '11,

Observations on the Hardiness of Plants Cultivated at the New York Botanical Gardens, Geo. V. Nash. G. C. A., 12:172-5. March, 11.

Perennials, E. O. Orpet. A. F., 36:400. March 25, '11.

Pruning Shrubs and Roses, P. T. Barnes. S. L., 12:246. April, '11.

Preservation of Cut Flowers, V. Ducomet. F. E., 31:597-8. March 25, '11. Prizes in Plants, G. E. Walsh. World Today, Chicago, 20:231-3. Feb., '11. Ravages of the Millipedes on Parliament Hill, Thos. E. Davis. Illust.

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Saving Trees by the Use of Cement,
M. L. Davey. Illust. Sci. Am., 104:

275. March 18, '11.
 Science of Growing Roses, W. R. Pierson. F. R., 27:45. March 30, '11.



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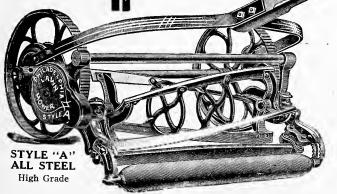
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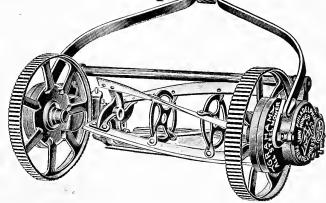
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Spraying Machinery. F. G., 22:50-1. March, '11.

Spraying Notes for Spring. A. F., 36:300. March 11, '11.

Seven Acres in the Suburbs, J. W. Thew. Illust. S. L., 12:249. April, '11.

Spraying Calendar. M. H., 39:102-3. March, '11.

Spraying Mixtures, Prof. A. G. Ruggles. M. H., 39:104-5. March, '11.

Some German Forests, F. A. Waugh. Illust. C. G., 76:201-2. March 2, '11. The National Flower Show. Illust. F. R., 27:25-37. March 30, '11.

The Yucca and The Indian, C. F. Sanders. A. B., 17:1-3. Feb., '11.

Three New Plants for the People's Gardens, D. Fairchild. Illust. S. L., 12:243. April, '11.

The Gladiolus, H. Youell. Hort., 13:420. March 25, '11.

Trees for City Planting, A. T. Hastings. G. C. A., 12:194-5. March, '11.

The Technique of Crossing and Hybridizing. F. E., 31. March 4-11, '11.

The Best Plants for Special Purposes, W. Miller. Illust. G. M., 13:156-7. April, '11.

Triumph of the Climbing Rose, L. Barron. Illust. C. L. A., 19:351-6. March 1, '11.

Vines and Plants for Shady Places. F. E., 31:577. March 25, '11.

Why It Is Best to Plant on a Northern Slope. Illust. John Craig. S. L., 12:248. April, '11.

Zoo Nursery, L. Crozer. Illust. Col. lier's, New York, 46:20. Feb. 11, '11.

REPORTS, ETC., RECEIVED

Twenty-third annual report of the Agricultural Experiment Station of Purdue University, Lafayette, Ind.

Experiment Station Work, Farmers' Bulletin No. 430, the United States Department of Agriculture.

Charter, By-Laws, Rules and Regulations of the Oswego Rural Cemetery Association, Oswego, N. Y., illustrated with half-tone views of the grounds.

RIGHTS OF HEIRS TO CEME-TERY LOT

(Concluded from page 526)

ment of burial, either before or after the death of their mother in this lot. Then, does the fact that this lot was acquired by an executor of Governor Brown, conceding that it was purchased with money of the estate, change either the title or devolution of this property? We think not. It was bought for the estate of Governor Brown. The lot was purchased with a view to the interment of his body and the erection of a



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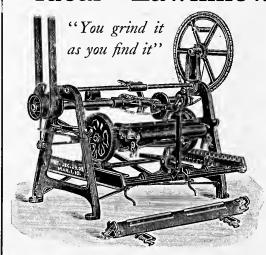
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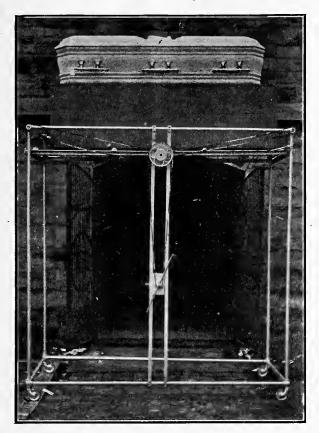
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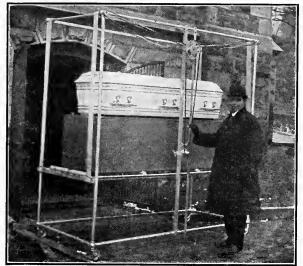
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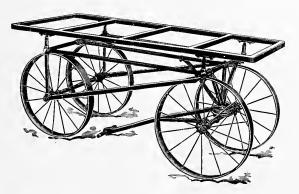
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monument thereon, and as a burial place for those of his blood who came after him. That his widow was entitled at her death to have her body repose in that lot by the side of her husband is unquestioned. It is equally true that the child of this second marriage, as well as the children of the first marriage of Governor Brown, and their descendants, are entitled to sepulture in it. But we do not think that the defendants, who were the stepchildren of Governor Brown, can any more claim an interest in the lot on account of inheritance from their mother than if strangers to her, she had undertaken in her lifetime to convey to them an interest in the property. While it is true, as has been stated, that under the will of her husband, Mrs. Brown had a one-sixth interest in his estate, yet this interest could only be ascertained upon a proper settlement of the estate. In this settlement the money used for the purchase of the lot, if in fact money of the estate was so used, would be taken into account, and she would be credited with her proportionate interest in that money, but it does not follow from this that she would have a right in the lot.

We think that the complainants have a right to a decree setting aside the conveyance of the Sanders to Marshall and wife, and a perpetual injunction as against the latter. A decree will be entered in accordance with this opinion and in addition to what has been indicated above, it shall be adjudged that J. E. and Narcisa Sanders have no title or interest in the property.

The cost of the cause will be paid by the defendants.

MAUSOLEUMS IN THE LAND-**SCAPE**

(Continued from page 523)

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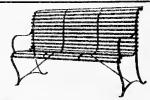
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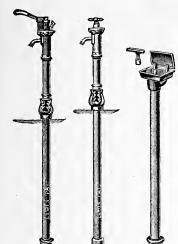
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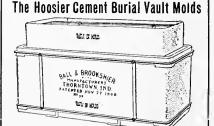
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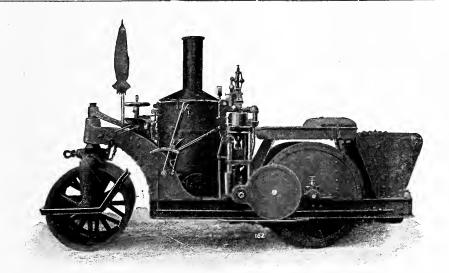
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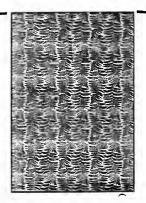
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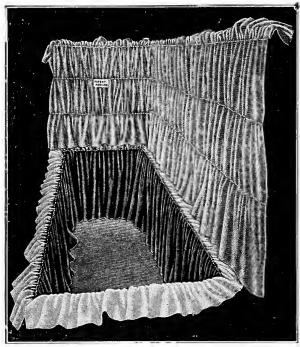
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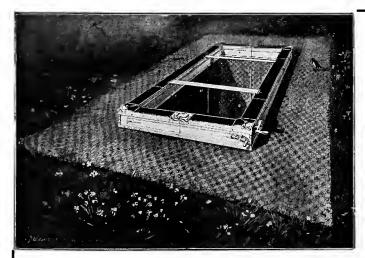
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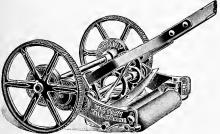


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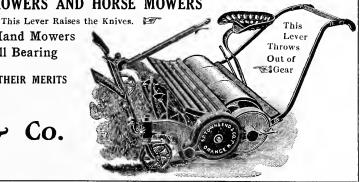
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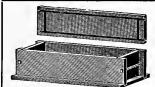
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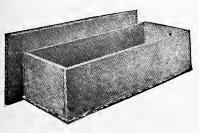


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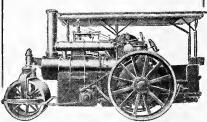
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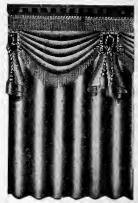
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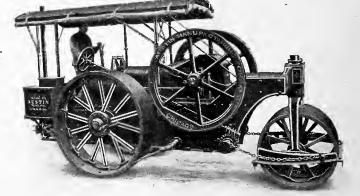
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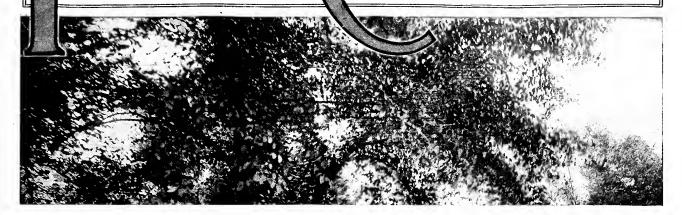
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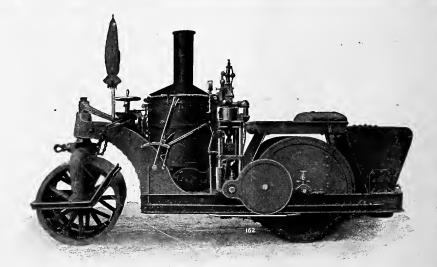
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Walter H. Wheeler, Superintendent

William F. Landes, Secretary

THE CROWN HILL CEMETERY

Indianapolis, Indiana, February 16, 1911

The Davey Tree Expert Co., Kent Ohio.

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Yours very truly. (Signed) Walter H. Wheeler, Superintendent



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The beauty which is created and maintained by that splendid body of practical men who superintend our parks and cemeteries is sufficient proof of their skill. The keeping of the grounds and the transaction of regular business is great enough load for them to converge them to converge them.

of regular business is great enough load for them to carry—sometlmes too great. Even if they were especially trained tree surgeons (which they are not), they have no time to devote to the trees. If anything is done it is rough work by the ordinary unskilled labor which happens to be available. The correct treatment of trees requires both a scientific and practical knowledge of tree-surgery; it requires long and careful training and the skill which comes from it; it requires the agility of youth for climbing and the almost reckless abandon of men to the dangers of working high in the air; it requires special tools and equipment. You cannot expect a plumber to be a painter, a carpenter to be a florist, or a physician to be a dentist. It is nothing against the physician that he is not a dentist, nor is it to the discredit of a florist or gardener that he is not tree-surgeon.

dentist. It is nothing against the physician that he is not a dentist, nor is it to the discredit of a florist or gardener that he is not tree-surgeon.

The Davey Tree Experts are Tree-Surgeons and they are nothing else. They work at nothing else from one year's end to another. They are expert because John Davey taught them the principles and practices of tree-surgery and because they work at it constantly. The responsible men in the Davey service are trained in the Davey Institute of Tree-Surgery. There is no school like it and tree-surgery cannot be learned elsewhere. They save trees—actually save them and bring them back to proper physical condition. Wounded and crippled trees need the Davey experts. The cost of the Davey service is not forbidding. It is the quality service. An inspection of the trees under your charge is desirable. Let a Davey Tree-Surgeon make a careful examination of these trees and tell you fully and frankly what conditions he may find and what treatment may be necessary. When a representative is in your locality an inspection can be arranged without cost to you. Write at once.

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Illustration of White-leaved Linden

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PARK AND CEMETERY

AND LANDSCAPE GARDENING.

Vol. XXI

Chicago, May, 1911

No. 3

The Late Boston Flower Show

The very successful second National Flower Show, recently held at Boston, Mass., has given rise to the question of organizing an association for the purpose of holding a national show annually. The idea is a good one, which should not be permitted to be laid away with the many other good things that are shelved merely for the want of an organizer to interest the public. Flower shows are educational for the masses and indirectly of great pecuniary benefit from a commercial standpoint. But such interests must not be allowed to dominate an organization of this kind. There are non-professional flower lovers in every city and town in the country who would be glad to co-operate with the professionals in an organization of this kind, and, as Mr. Burpee says in "The Florists' Exchange," there would be no difficulty in obtaining "sufficient underwriters" to insure raising an adequate quarantee fund.

Memorial Day

"No feller can tell" anything about the weather, but unless an unexpected setback comes, the approaching Memorial Day will witness a wealth of blossoming seldom surpassed. The predicted low temperature with its train of disaster was not as general as was feared, although in some localities the damage was discouragingly severe. While the temperature has been low and frost frequent up to this middle of May, they have only tended to retard bud development in both fruit trees and ornamentals. The spring show in the parks and cemeteries is one of unusual beauty, which will naturally deepen the everincreasing interest in nature and its benign influences. And it is as refreshing as ever to watch the children eagerly hunting for the little spring blossoms which never elude their prying search.

Save Niagara Falls

The American Civic Association is again urging the American people to insist upon the preservation of those wonderful Falls of Niagara, the practical destruction of which certain interests seem determined to carry out. All the dollar bill interests of the world, as a fact, decry sentiment, and the American section declares that sentiment alone is demanding the perpetuation of Niagara. The people must never allow such a despicably senseless idea to influence them; for every thinker of the human race today knows full well that sentiment has been the progressive force in the world's development. It is involved in every good as well as patriotic movement and cannot be separated therefrom. Hence there is no weakness at all represented in the people's demand that Niagara shall be preserved. But the interests interested, and their thoughtless advisers, are quite powerful at this stage of our history, so that the appeal of the American Civic Association that every reader of this should make an urgent and immediate demand upon his representatives in both Houses of Congress to give every possible assistance towards the passage, unamended, of Mr. Burton's Senate Joint Resolution 3, continuing, during the life of the Waterways Treaty, the provisions of the Burton Bill. We ask our readers to write their representatives at Washington and to advise their friends to do likewise.

A Great Scheme for New York's River Frontage

The Commissioners of Parks and Docks, of New York City, are considering a scheme, which has in times past been suggested in a general way, to fill in a strip of the Hudson River foreshore, 200 feet wide and two and a half miles long, between 81st and 129th streets; to build thereon docks, platforms, and railway tracks for steamship freight traffic; roof the tract over, and lay out on it a park for public use. "The Scientific American" of May 6 has an illustration of the project which is startling in its magnitude. The port of New York is actually suffering from lack of modern dock accommodations, while the surface railroads along the river front are an offense to a metropolitan city; so that the officials above have united in presenting to the city authorities a gigantic scheme, feasible withal, which would further enhance the value and beauty of Riverside Drive and Park, and provide a considerable addition to New York's dockage area and facilities. The commissioners have given the project long and earnest consideration and are presenting it as a valuable and practicable plan for meeting growing requirements.

Fraudulent Spraying Liquids

Michigan is to be highly commended, and its example followed by other fruit-growing states, for its legislation to protect the fruit growers against the frauds so frequently attempted, and often perpetrated, in the spray material business. Prof. L. R. Taft, state inspector of nurseries and orchards, has found it necessary, once more, to warn the fruit growers of the state, and the warning may well be heeded in other parts of the country, against fraudulent spraying materials now on the market. As a rule, this class of materials is generally heralded as cure-alls for all insects and diseases to which fruit trees are subject, which are claims extravagant enough to invite immediate suspicion. Prof. Taft would be glad to obtain the names and addresses of the manufacturers of all insecticides and fungicides, of which any farmer or fruit grower in Michigan may be in doubt, as well as the names of agents or dealers handling

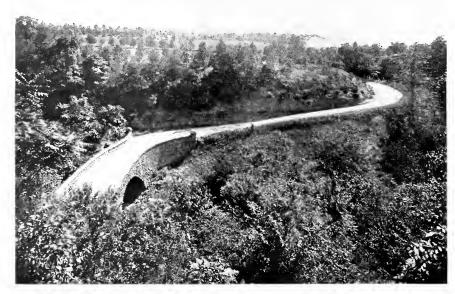
First American City Plan Exhibit

The first American Municipal City Planning Exhibition will be held in the City Hall, Philadelphia, May 15 to June 15, and it will be open free to the public. Mayor John E. Reyburn has been particularly active in bringing this about. This exhibition will consist of models, perspectives, photographs, plans, maps, etc., illustrating the growth of city planning in America and Europe, and visitors will have the opportunity of studying the development of the modern Continental city, the marvelous growth of the boulevard system of Paris, the garden cities of England, the municipal housing enterprises of Ulm, the famous docks of Liverpool, Antwerp, Rotterdam and Bremen, etc., as well as what has been accomplished in our own United States. The exhibition will undoubtedly mark an epoch in the work in this country.

Apropos of the above, mention must not be omitted of the Convention of the American Federation of Arts, which will be held in Washington, D. C., from May 16 to 18, and which will be fraught with great possibilities in the development and application of art generally in all its varying outlook. The most prominent men in the country will take part.



LANDSCAPE WORK IN SCHENLEY PARK, PITTSBURG



CONCRETE BRIDGE NO. 2, SCHENLEY PARK. Showing cut into hill in order to get out of the Ravine.

One of the surest indications of the permanent advancement of any city is the condition of her public parks. These are not only her breathing places, but sources of culture and refinement. It is pleasing to note that the city known not so very many years ago as "The Smoky City," has emerged from the grimy atmosphere, and while now deservedly holding the sobriquet, "The World's Workshop," she has made rapid strides along lines of culture, and in none more noticeably than through her splendid system of parks.

A few years ago Pittsburg had only one park, a long narrow affair scarcely worthy of the name. Today her park system comprises more than 900 acres, of which Highland, containing the "Zoo," and a fine bronze monument to her Stephen Foster, author of "The Old Kentucky Home," is easily second in importance. But Schenley, 420 acres of magnificent scenery less than three miles from the heart of the city, compares favorably with any of the great American parks.

Three hundred acres of this tract are a gift from Mrs. Mary Schenley, who inherited it from her grandfather, one of the pioneer settlers and

the founder of the glass industry in Pittsburg; the remainder she sold to the city for a nominal sum. The tract consists of rolling plains diversified by picturesque ravines, some of which are still in the primeval state. At the entrance stands Carnegie Library building, a massive structure covering more ground than the Capitol at Washington, the greatest of Carnegie's gifts. Beyond are the Carnegie Technical Schools, where nearly two and one-quarter thousand pupils are learning the best things in industrial education every year. A short distance away is the Phipps Conservatory, the gift of Carnegie's playmate of barefoot days and partner in those which made millionaires, and one of the finest conservatories in the world. Thus the best that both nature and art can give are happily clustered in Schenley; and the much debated question of which is the superior will still prove as difficult to answer as in the debating clubs of a generation ago.

The visitor to Phipps Conservatory



CONCRETE BRIDGE NO. 1, SCHENLEY PARK. Rough stony surface conceals the concrete

enters through the ivy-covered entrance to a most inviting and restful reception room. The spacious conservatory is so arranged that by following directions one may see every department without danger of retrac-The collection of palms, tree ing. ferns and other tropical plants is much finer than that shown at the Columbian exposition, and the student of the economic side of plant life finds abundant material in the coffee, tea, spices and dyes represented. One of the conspicuous features of the lily pond is the Victoria regia, the great water lily of the Amazon. The gloxinias were at the time of our visit a prominent attraction, the varieties representing the most delicate markings or the richest and most intense shades of color. The chrysanthemum room, is well filled, and promises to give the annual display for which it has gained a wide rep-



"THE RAVINE," IN SCHENLEY PARK. Light streaks at left show lines of bridle path.



DRIVEWAY PLANTING, SCHENLEY PARK, PITTSBURG.
Note how every other bush has been cut out to give others full development.

utation. All plants are well kept and distinctly labeled, the latter feature being one greatly appreciated by the general public.

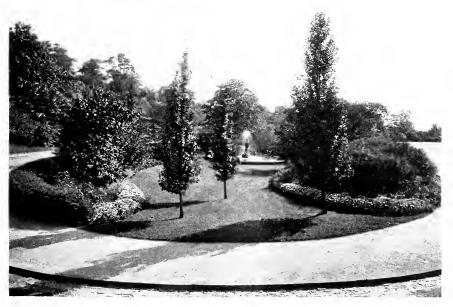
Between the conservatory and the Technical Schools is a monument worthy of note in that it is one of two raised by popular subscription to men still living. It is surmounted by a life-size bronze statue, and is a memorial to Edward M. Bigelow, the "Father of the Parks," and rests on a raised mound covered with the trailing Memorial Rose.

Scarlet geraniums are massed along the pathway leading to the Library entrance, their bright color contrasting beautifully with the light grey sandstone. Just opposite is a simple shaft of Quincy granite, a memorial to Christopher Lyman Ma-Gee. It was he who gave the "Zoo" to Highland Park; yet possibly this

simple tribute of pure water where city water is none of the best is proving a memorial more appreciated. The water is sterilized, cooled chemically without the use of ice, and brought to the public through a bubbling mouthpiece, thus abolishing the public drinking cup.

The general plan of the park has been to mass the exotics on the natural slopes, leaving the more rugged scenery as nearly as practicable in its primeval state. On the one side we may behold the best of landscape gardening; on the other nature's majesty and grace.

The path past the conservatory leads along the side of a lily pond where Nymphaeas, blue, pink, yellow, and our incomparable native white strive for supremacy. Beyond is the Panther Hollow bridge, read-



CURVED DRIVE, WITH LINES OF PLANTING DESIGNED TO HARMONIZE WITH LINES OF THE ROADWAY.



BRIDLE PATH BUILT WITH TEMPORARY LABOR OF UNEMPLOYED MILL WORKERS.

ily identified by the crouching panthers on either side of the approach, and crossing a ravine of the wildest type. The sides are mostly covered with native trees and shrubbery, many different species being represented either singly or in dense masses. Frequently there is an outcropping of the native rock, and on one of the treeless slopes rhododendrons have been planted in quantity.

At the farther end of the bridge is a monument with life-size bronze statue erected to the memory of Gen. Hawkins, who died on the return trip from service in the Philippines. Following a winding path of 150 steps, one may descend into the heart of the ravine. An artificial lake large enough for boating, and a natural spring render the place a favorite one for picnic parties. The path crosses under the bridge and out upon the other side, rustic bridges, arches, and cool retreats rendering the walk most delightful.

The accompanying illustrations show some fine views in the park and also some interesting landscape work that has been carried out by George M. Burke, superintendent of the Pittsburg parks. One of the pictures shows a drive that is now 14 years old. It may be noted on the right-hand side, where every other bush has been cut out in order that the remaining shrubs will have room to develop into perfect specimens. Mr. Burke says of this improvement: "This is one of the things in landscape work where many a superintendent's heart often fails him. But it should undoubtedly be done at the right time;

especially where planting has been set out to obtain immediate effect."

In the view at one of the turns on a drive it is interesting to note that all lines in this picture are in harmony with the curves of the drive. The three sister trees in the foreground are Salisburia adiantifolia, and are fine specimens. In the background is a fountain.

The famous ravine in Schenley Park is one mile and a quarter in length. This view of it was taken from the center of a high bridge, which spans the ravine over the two lakes. Two years ago, during a panic, the City Councils appropriated \$220,000 in order to give the iron-mill laborers employment in the various parks of the city Mr. Burke constructed in this ravine with this labor a bridle path 24 feet wide and a mile and a quarter long, with two

concrete bridges, and two wooden rustic bridges. The light streaks in the photo on the left-hand side show the line of the bridle path.

Concrete bridge No. 1 is on the bridle path, in a ravine called "Little Panther Hollow," at a point known as "Horseshoe Bend." In the construction of this bridge, as may be seen, there is not a particle of the concrete visible in the picture. The surface shows a rough and ancient style of work, which is Mr. Burke's idea for covering concrete work in parks.

Another picture shows concrete bridge No. 2, which is constructed of concrete and veneered with Tuffa stone, obtained in Ohio, which resembles very much a slag. In doing this work the superintendent set up wooden frames; then on the inside of all frames he set up this stone and placed the concrete against it, working it with wooden rammers, until the water from the concrete floated on top. He was compelled to excavate to a depth of 13 feet from the spring line of the arch for a foundation. This bridge was constructed by men picked from the mill workers, and cost \$5,000.

This picture also shows the extreme end and turn on the bridle path. In making this Mr. Burke was compelled to cut into the side of the hill in order to extend and get out of the ravine with the bridle path. Another picture shows a stretch of the bridle path between bridge No. 1 and bridge No. 2. The job of superintending five hundred mill-workers on this kind of work was some accomplishment in itself. The plan was to work 500 men for a month and then lay them off, and then take on 500 others in order that all of the idle men would have an opportunity to earn a little money.

BROADER USES FOR THE PARKS

From an address before the American Association of Park Superintendents by J. Horace McFarland, President American Civic Association

I am to speak to you of "The Reasons for Parks." It seems especially fitting, in the first place, to get some understanding of what parks are or have been considered to be. I have therefore taken the trouble to look up the definition of the word "park" in Webster's Dictionary of 1864. The third definition there given is: "A piece of ground in or near a city or town enclosed and kept for ornament and recreation." I have also looked up the Century Dictionary's definition of forty years later. It is this: "A

piece of ground, usually of considerable extent, set apart and maintained for public use and laid out in such a way as to afford pleasure to the eye as well as opportunity for open air recreation." Thus, in forty years, the dictionary makers have come to have a new idea in respect to the purposes of a park. I doubt not that a revision ten years hence will give us a yet broader definition.

I insist then that one reason for parks is that we have a crowded working population, to which we need to give the best possible opportunity to live and work in full efficiency. I insist that no well maintained park is ever an expense. It is always an investment, and to an audience like this I need not press that point.

I venture to propose a definition of the word "park," more modern than that given in the dictionary, thus: "The purpose of a park is to serve best those who need it most." Very few men of wealth or large means or moderate means need or use park facilities. The old idea that formerly prevailed that a park was primarily to furnish a driveway for those who had horses and a wonderful profusion of flower beds for others who walked has disappeared. We are not now considering those who drive, even though we must consider a whole lot those who automobile, not because we want to, but because they will have it so. They are really intruders.

Nor are we considering the kind of parks we used to have, with "keep off the grass signs," the flower bed parks, the stone dog parks, the iron figure in parks, the kind in which the "art" of the gardener of the day used to be exploited to the greatest extent. I have recently seen one of these parks, about twenty acres in extent. You know it at once when you come near it because of the entrance. The gates combine all the styles of architecture that man has ever imagined and many which he ought never to have imagined while sober. Inside you are faced with wonderful carpet bed, or possibly I should say, a curtain bed. You see an elaborate and ugly residence for the superintendent and his assistants. Then you climb painfully up a roadway, an asphalt paved hill roadway. You see a walk paved with such absurd formality that you try to step off and walk on the grass, but in it you see some wonderful' contortions that really alarm you. As much as I could make out of it they seemed to read "you be damned," but I was told they were carpet beds. When you get to the top you find an open space in which you may stand, to then turn around and walk down again, for an interesting view has been carefully planted out with Carolina poplars. This park is twenty acres in extent and costs \$20,000 a year to maintain. There is not one single thing in it to excite anything but derision.

The first requisite in a proper modern service park is that it shall give fresh air to the people, and provide them with facilities for recreation. I maintain that parks which go into

fancy gardening, at least until all the population of that town have had an opportunity for wholesome play and recreation, are wasting somebody's money. I guess it is the people's money.

The modern parks are intended to promote body building on the part of all the people, men and women, boys and girls, because the city needs well built men and women, boys and girls, and because parks are cheaper than policemen or hospitals. Another reason for the existence of parks is to provide safe and pleasant social meeting places for the people of their community. These modern parks are not always large in area. You who are engaged in actual park work would not have large parks, but as many small ones as you can arrange for. Such parks should be so frequent that they would serve in the city as ribbons of green into the folds of which may easily come the tired worker.

Modern parks ought to go a step further and offer municipal competition to the forces that now tend to deplete the physical energies and sap the moral strength of the people. The American saloon is a widespread and evil institution, yet it meets a definite social need. It is at present the only place in which the average laborer can secure equality, society, light and color. He finds his only opportunity for relaxation in the saloon, unless the community comes into competition and provides him with suitable opportunities in the park.

Summing this all up, I say that the present purpose of the park is to promote the highest standard of community efficiency. It is not to have us who are concerned in the making and maintaining of parks merely make them beautiful. It is to use the items of park beauty to the end that the people may be better able to work and make money, and therefore be more efficient in the community.

Former Mayor McClellan of New York has written some significant words. He said:

"In a self governing community the ultimate object of government is the happiness of the governed. * * * Something more is needed to make the happy city than health and wealth and wisdom. * * * The city healthy, the city wealthy and the city wise may excite satisfaction, complaisance and pride, but it is the city beautiful that compels and retains the love of her people."

Nothing goes so far toward making the city beautiful as efficient

parks. Your truly beautiful park is efficient, and then the people are efficient

The broadest judgment must be used as to what makes for beauty in parks. I do not consider that park beauty consists in making gaudy floral carpet beds or in the statuary or stone contortions such as you find in some portions of Central Park, as a little reminiscence of the time when the more money that could be spent the better it was! I have mentioned the example of the old style parks, the purpose of which was to exploit the gardener's art.

The new style park is to increase the efficiency of the community. Such are found in many places. Particularly they are found in Chicago. I have in my own mind some of these South Side centers-little parks of about ten acres. Some of you know them better than I do. They are scattered about the city. They have green grass. They have trees beyond, and a field-house, and the fieldhouse is the people's country club. Those small parks are open every day in the year; there is something doing in them pretty nearly every minute of the day after ten o'clock in the morning. In the summer days, as you know, there are swimming pools and open air gymnasia for the children; for the older people there are reading rooms and lecture halls, in which in the winter lectures are provided and in the summer assemblies arranged by the people. There are rooms used by the families or clubs for social purposes. The whole effect of these wonderful centers is to promote the social efficiency of the community. No one would say for a minute that the man, woman or child who had been in Davis Square came away less able to fight the battle of life than before. When the Superintendent of Davis Square said to me one hot July Sunday morning: "Yesterday afternoon 2,763 men from these stock-yards bathed in the shower baths after four o'clock in the afternoon," he was saying in effect that those 2,763 men did not immediately visit such places, on leaving their work, as would make them less able to return in good order to work on Monday morning. And so you see how Chicago, perhaps almost accidentally, has the highest ideals of parks. These baths and the other facilities of the small parks, meet a great need of the people and afford them means and opportunities that would otherwise have to be dispensed with.

FIRST LESSONS IN ORGANIZED PLAYGROUND WORK

Lowell, Mass., is one of the smaller cities that is pushing the newer work of organized playground activities intelligently and persistently forward. The annual report of the park department of this city recently issued tells of the playground work of last season in detail and contains much in the way of information and suggestion from the playground supervisors that will be of value to those who are new to the work of promoting organized play and play parks.

Last season there were three playgrounds in active operation from July 3 to September 1: on the South Common, the North Common, and Aiken Street. The attendance at all of these playgrounds was very large during the season. The interest of the children in the industrial work and in organized play was maintained throughout the season, due largely to the intelligent, persistent, and sympathetic work of the supervisors in charge. The industrial training of the boys and girls was particularly effective, serving the useful purpose to vary the exercises on the playgrounds. The playground movement was very much aided by the interest and co-operation of the Middlesex Women's Club and the College Club, notably by means of money raised through their joint efforts, the proceeds of an entertainment given under their auspices, whereby it was made possible to obtain the services of several supervisors, and to establish two local playgrounds in thickly settled districts at some distance from the Commons.

The experience of this season has made it certain that to get the best results from the playgrounds it is necessary that there should be a large number of efficient supervisors, that their work may be subdivided, and the number of pupils to each limited in number. To insure harmony and unity in the highest degree essential to secure the best results, the chief supervisor should be vested with full authority to deal with the supervisors under him, and to have sole direction of the work on each of the playgrounds. It is essential that he should have the earnest aid and co-operation of all of his assistants, To accomplish this he must be resourceful and tactful, winning or commanding ready obedience from all of the instructors.

The season was notable by reason of the splendid gift to the City made by Mr. Freeman Ballard Shedd of about fifty acres of land situated on the northeasterly side of Knapp Avenue in Belvidere. A plan of the land has been prepared by Ernest W. Bow-

ditch, landscape engineer, that shows the possibility of making the combination of a park and a playground that would be second to none of its size in the country.

An appropriation of ten thousand dollars recently made by the City Council will be expended, to clear the land in part and to build a roadway from the entrance and to put into condition for skating and coasting the land available for such purposes. It is the intention of the Commission as means are afforded to make this large tract of land the recreation grounds of the city, not for a ward or a locality, but for the whole city, with the view that there may be easy access thereto by the street railway, and that the grounds may be laid out in such a way that the youth of the city may have an opportunity to engage in all sorts of athletic sports and exercises.

It has been demonstrated beyond question that one great need of the city is the small playground, properly supervised, in the congested districts, of which there are many; that these smaller playgrounds must be fenced in and properly protected against annoyances and the intrusion of older and vicious boys; that only younger children should be admitted to these small playgrounds; that



PLAYGROUND EXERCISES IN OPEN AIR AMPHITHEATRE, SOUTH COMMON, LOWELL, MASS.



PATH THROUGH NEW SHEDD PLAYGROUND, LOWELL, MASS.

some form of industrial work should be carried on; and that some shade from the heat of the sun should be furnished with some shelter where the sessions may be held in stormy weather.

On no day during the summer, with the exception of the week-end intermission, was any one of the grounds unsupervised. On all of the grounds the afternoon attendance was decidedly greater than that of the morning. The attendance on Saturday morning was very small, most of the children having extra duties at home on that day.

Industrial work was introduced and became very popular. Practically every scrap of material which was provided was used. Instruction was given in plain sewing, seaming, gathering, overcasting; in embroidery; in cardboard construction; in paper-cutting and folding; in bead work; in knitting; in sewing cards for the very youngest children; in raffia work; in reed and raffia basket weaving and cane-seating for the older girls. During the last three days of August the exhibit of industrial work was displayed in two show windows on the leading street.

A meeting of the women directors was held once a week, in order to keep the work on all of the playgrounds somewhat uniform. Each playground had different characteris-

tics and conditions, so that absolute unity in working form of the different grounds was not strived for. At these meetings there was always a generous giving of help from one director to another. The Play Festival at the close of the season, when all of the children gathered together from all of the grounds, had the effect of combining their little energies to make, not only their work, but the work done by anyone, on any ground, as good as it could be made. The Festival included an interesting pro-

gram of dances, games and drills given in the fine natural amphitheater on the South Common. The day on which the Festival was held was perfect, and thousands of people came to watch the results of the children's supervised play.

Besides the account of the playground work, the report contains the regular annual summary of the work of the park department, and a valuable report on the street trees by Superintendent of Parks Charles A. Whittet.

LOCAL CHARACTER IN PARKS

From a Report to the Indianapolis Park Board by George E. Kessler, Landscape Architect

The period of park development prior to 1908, the time of the reorganization of your entire work, accomplished many excellent things in the acquisition of splendid park prop-This was evidently an expression of feeling the need of places of recreation. It is true these efforts were all sporadic, without continuity or connection, and with only an indifferent understanding of the uses that a community has for recreation grounds, or its specific needs in its different units. However, the properties were acquired and at least partly improved. But the rate of growth of the city went far in advance of the acquisition and improvement of properly situated park or parkway lands, and a certain measure of neglect in this respect becomes costly now in the second period or new era of the city's development.

With only a few exceptions American cities generally in their formation have made the same mistake, but there are few today that do not appreciate the need of the systematic, proper development of the best forms of outdoor recreation and of well conceived and properly placed lines of communication between the business and the residence districts of thecities and unifying outer areas.

You are now facing, in the second period of your park development, the re-creative era of your city planning -the imperative need of unifying and tying together the different and widely separated districts of the city. In your fundamental planning, the central business district was built upon broad lines, with wide streets and ample proportions and with diagonal thoroughfares splendid reaching out in the different directions from the business center. In your later period of development an evidently penurious and entirely mistaken system of street planning was permitted to creep in, resulting in a lack of wide streets and in failure even properly to continue those which had been begun.

The salient and most important portion of the present movement in

the re-creation of a beautiful Indianapolis is based upon the existence of the streams flowing through the city. You are wise in your conclusions to adopt the idea of consecutive imalong the provement principal streams, creating a chain of parks of the very highest usefulness through long reaches of residential districts. Fortunately these streams lie in directions which, as an incident to park development along their shores, serve as the finest and most direct lines of roadway communication. And while the fundamental importance of local recreation grounds is emphasized, the incident of fine driveways will in time become that element which will surprise and gratify your own people in leading them into the real beauty spots of the city, and become an element of advertising value which will

more than compensate for all expenditures in their establishment. In this connection will you permit a reference to Kansas City, almost identical in numbers and population. That city permitted its park department to build up its boulevards, encircling and passing through the city, and permitted the acquisition and improvement of lands which were characteristic of its topography. That community has become proud of its development. and in the latter years has received perhaps even more than its share of favorable comment from its residents and visitors. A justification for such favorable comments lies merely in the use of properties characteristic to that region, and the keynote of the improvement of those properties has been the conserving of the natural and characteristic beauties there.

A YEAR IN WILMINGTON PARKS AND PLAYGROUNDS

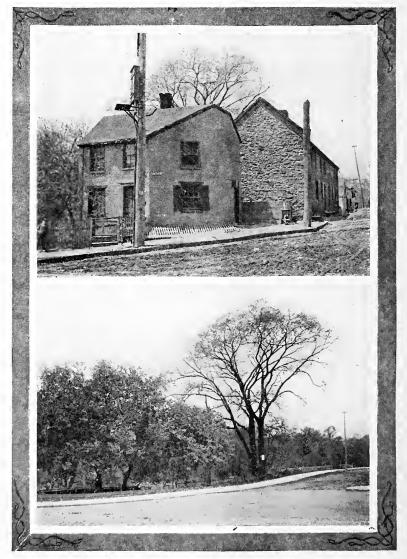
The last year's park work in Wilmington, Del., brought some substantial additions to the park area, and some important betterments to the system. One of the most interesting improvements that shows the striking transformation effected in a neighborhood by park-making is seen in the accompanying illustration of the "before and after" views of the Market street entrance to the North Drive.

The only funds available for the use of the Commission have been an unexpended balance from last year of \$7,338.97, the annual appropriation of \$18,000 and the usual receipts from rentals, swimming pools, etc., of \$2,-344.22, a total of \$27,683.19. The expenditures have been \$23,520.44 leaving a balance of \$4,162.75.

Notwithstanding the lack of funds, the city has been very fortunate in securing several very desirable tracts of land which in the future will be of inestimable value.

The largest tract was deeded by the E. I. DuPont de Nemours Powder Company, through the exertions and by the generosity of William P. Bancroft, and contains 106.29 acres. Adjoining this is 16.75 acres placed in trust by William P. Bancroft in 1903, which has been transferred to the city. This land is for the most part heavily wooded and is admirably adapted for a woodland park.

In North Brandywine Park a new 1 ath was laid along the north side of Jessup's Road, and is of concrete 6.5 feet wide and 2,200 feet long. At the same time Jessup's Road bridge Continued on Pace XVI



MARKET STREET ENTRANCE TO NORTH DRIVE, WILMINGTON, DEL., BEFORE AND AFTER IMPROVEMENT.



The new Park Board of Fort Worth, Texas, met and organized on April 15 and found some \$16,000 of available cash on hand. The inventory showed a total of 215.8 acres of park property acquired at a cost of \$97,743, with an estimated present value of \$420,500. Park buildings and equipment are valued at \$3,500. The inventory does not include the new Daggett Park site, nor that in the Ninth Ward, the formal approval of deeds and title not having yet been made.

The Board of Control of Montreal, Canada, has recommended to the council that the Molson property on Pine avenue be purchased and added to Mount Royal Park. The purchase price is \$1 a foot, which will make the total cost \$1,070,000. If the purchase be not made the property will be sold for building lots, and a small colony of houses planned right in the center of the park. The property will probably double in value upon the acquisition by the city.

Prof. L. R. Taft, of the Michigan Agricultural College, Lansing, Mich., has again found it necessary to warn fruit growers against fraudulent spraying materials now on the market.

"A whole mountain range in miniature" is the way that one member of the joint foothills committee of Denver, Colo., describes the scenery visited recently, and it is believed that Denver will have at its doors a natural park embracing every variety of scenery furnished in the Rocky Mountains. Rugged grandeur, inspiring views, limpid mountain streams and splendid pine forests; all these are to be found in the neighborhood of Eden Park, Bear Creek and Turkey Creek canons. When the site is selected transportation facilities will be immediately studied.

James Cummings, landscape gardener, who was in immediate charge of the work at Balboa Park, San Diego, Cal., for Olmsted Brothers, of Boston, resigned April 1. He was accused of employing non-residents through an employment agency in preference to resident workingmen. Mr. Cummings came to San Diego from Colorado Springs and has been employed for several years by the Boston firm.

The favorable vote on the bond issue for Lincoln Park, Chicago, at the recent election, will soon add 240 acres to this favorite park. The method of

the Park Board for providing proper soil for the park area may be interesting as well as instructive. The Park Board some time since purchased a 100 acre farm on the drainage canal north of Lemont. This farm is covered with the richest of soil and this is scraped off the surface and transported by means of scows down the canal and river and finally dumped on to new clay sub-soil of the new section. To buy this soil anywhere the cost would have been prohibitive. A certain section of this farm is reserved for nursery purposes.

The proposition put up to the voters of Hagerstown, Md., to bond the city in the amount of \$50,000 to establish a park received a large majority of favorable votes.

Mr. W. M. Krebs, formerly a park commissioner of Cedar Rapids, Ia., and who has been visiting on the Pacific coast, has some good things to say of Golden Gate Park, San Francisco. He says:

"I was wonderfully impressed with Golden Gate Park. It is very large in area and the treatment, I should say, is excellent from a landscape point of view. At one time it was a desert of sand dunes, but now the great variety of trees and shrubbery. its beautiful drives, magnificent palms. its fine statuary, its wonderful museum, its playgrounds, its zoo, and special bridle paths are all past description and must be seen to be appreciated. When one remembers that San Francisco was in ruins four years ago. one can hardly understand the towering office buildings and stores that might grace Chicago or New York. On my way south I visited Del Monte gardens, 110 acres in extent, containing every known shrub, flower, vine and tree that will thrive in that locality. The scene is a dream of loveliness and is well worth a visit. The Hotel Del Monte is one of the finest on the coast.

"On the 22d of February we visited East Lake Park, Los Angeles, on Iowa picnic day, when they say 30,000 people were present here; it is a very beautiful park. But in Southern California they have the climate to grow palms and most other trees as well as flowers and vines. Every blooming thing blooms. But how I longed for a glance at a sturdy oak, a majestically graceful elm or the symmetrical hard

maple of our own East and Middle West! Californians cannot duplicate We also did some mountain climbing that was really exhilarating. One view of the Pacific ocean, 40 miles away, and the lovely valley, including Sierra Madre, Monrovia, Pasadena and other smaller towns, was magnificent. This view of the valley embraces the ranch once owned by 'Lucky' Baldwin, comprising 67,000 acres. Whatever may have been his neculiarities, he had his strong points. The streets, laid out in the towns in this valley, are lined with trees in a very uniform manner, which is his best monument. The heirs are now at law over the estate."

At the annual meeting of the Park and Boulevard Association of Quincy., Ill., held in March, a board of directors was elected and Mr. E. J. Parker was unanimously chosen as president, this being his twenty-third election to that office. Mr. Parker has been one of the most energetic and progressive men in the country in the work of outdoor improvement and park development, and his experience in such work gives to his opinions and advice much importance. The Park and Boulevard Association of Quincy, Ill., and its methods and success. should be studied by all interested.

The firm of Hare & Hare, landscape architects of Kansas City, Mo., has been employed by the commissioners of that city, who have charge of the parks, to succeed Mr. Geo. E. Kessler in carrying out a park system. Mr. Sid J. Hare has just returned from Tacoma, Wash., where he has been studying Point Defiance Park, a beautiful tract of high land of 640 acres, bounded on three sides by water. It is a natural tract and possesses a number of very fine trees. Mr. Hare proposes to retain all the practicable natural features and believes he is developing one of the finest and most beautiful natural parks in America.

Sunday music in the parks of Quincy, Ill., proved such a success last year that it will be resumed this year. A modification is being considered to include an out-of-door chorus of voices in connection with the band, which, where it has been tried, has had great attractions for park lovers on Sundays. Quincy has been in the lead in park matters, and this comparatively new innovation in Sunday park music will undoubtedly be given serious consideration in this progressive Illinois city.

In speaking of the location of works of art in the parks, Mr. C. D. C. Jewett, Board of Park Commissioners,

Omaha, Neb., in a recent communication says: "My idea is that statues of our living ideals should be placed in art galleries or similar buildings, where the surroundings are suitable the year round."

Mr. C. M. Loring, of Minneapolis, Minn., and Mr. J. H. Reed, city tree warden of Riverside, Cal., were recently guests of honor at a picnic at Meadowbrook Park, San Bernardino, given by the civic section of the Woman's Club of that city. Both gave addresses and it may be taken for granted that two such apostles of the trees made deep impressions on their auditors on the subject so near and dear to them.

Senate and House bills, now before the Illinois Legislature, are intended to bring about the purchase by the state of Starved Rock and contiguous tracts of land, in all about 1,155 acres. The measures also provide for the forming of a state park out of this beautiful and historic bit of country. An appropriation of \$250,000 is required to secure the desirable results thus outlined. The public are hoping that the legislative committees which now have the bills in hand will report them favorably, and that they will pass at the present session. Readers at all familiar with the early history of Illinois will recognize how appropriate it is that this locality should become state property.

A novel plan to decide the location of a park is that of the Women's Improvement Club of Vallejo, Cal., which will arrange to conduct a contest to decide upon the site of the park. The city will be laid out in four sections, and votes will be received at \$10 a thousand from the interested property owners. The section offering the highest number of votes will get the new park. It is expected that \$10,000 will be received in this contest for improvements on the new children's playgrounds.

Hyacinths have been barred from the city parks of Boston, Mass., on account of their poisonous nature by Forester D. Henry Sullivan. The bulbs have been found not only poisonous to the person who handles them but also to the ground in which they are placed.

After years of controversy the city of Los Angeles, Cal., has established its right to hold as park property 800 acres in the heart of Griffith Park, deeded to the city several years ago by Colonel Griffith J. Griffith. This victory was won when Judge Wood of the Superior Court recently sustained the city's demurrer in the suit instituted by J. H. Smith last month, whereby Smith hoped to have a former judgment of the court set aside.

NEW PARKS

Martin A. Ryerson, of Chicago, owner of the old Indian burying ground near the center of Muskegon, Mich., has given the land to the city, with the proviso that the city maintain it as a park. In this plot many of the tribal chieftains who died during the early lumbering days of Muskegon were buried. Its large, white, wooden cross was kept in repair for years by Indians still living in the vicinity.

A formal deed conveying 40 acres of land to the city of Grand Rapids, Mich., to be used for park purposes, the gift of Mrs. Huntley Russell and Mrs. Lucius Boltwood, was recently presented to the board of park and cemetery commissioners. The deed contains no strings whatever except that the property is to be used for park purposes. It comprises the land on the east river bank, just south of the Soldiers' Home.

About \$5,000 is being expended by the Drs. Mayo upon Mayo and College Hill parks, both of which they have given to the city of Rochester, Minn. A. F. Langlois, a landscape architect, has been engaged to take charge of the parks. It is expected that when the work is completed the parks will be very attractive.

Muncie, Ind., is to have another new city park and resting place.

In behalf of the town of Morristown, N. J., the Board of Aldermen at a recent special meeting accepted an offer of Frederick G. Burnham and wife, of Sherman Hill, of a 28 acre plot of land, known as Burnham's Woods, for the purpose of a public park.

Charleston, S. C., has a new park, known as the "Old Faber Place," located on the Ashley river.

West Oakland, Cal., is to have a park, \$16,000 having been appropriated by the council for the purchase of a site.

Mr. Jonathan Mould and wife, of Reading, Pa., have presented to that city what is called the Mt. Penn pagoda and ten acres of mountain land for an addition to Reading's park system. It is a notable and fine gift and was accepted by the city council in grateful terms.

By a donation of three acres of land on the river front, the Chicago, Milwaukee & St. Paul road has facilitated the building of what is expected to be one of the most beautiful parks on the Mississippi river at La Crosse, Wis. A large force is at work on the park, which is mostly in the river bottom. The shore line is to be extended and the channel diverted. At the meeting of the city council of Fort Dodge, Ia., recently. a tract of over forty acres of land for a park was presented as a gift to the city, according to the stipulations of the will of Joseph Phinney, a pioneer resident who died two years ago. The land is worth \$16,000. The property is a beautifully wooded valley and hill on the bank of the Des Moines river, opposite the heart of the city, and will be a fine addition to the city's park system. It will make the main portion of the city practically enclosed in parks.

A new park will be laid out in South Cullman, Ala., by Hon. Ignatius Pollak, whose philanthropic leanings are well appreciated by citizens of Alabama. It will be located just south of the Kelhopfer home at the Sulphur Spring. The work has already been commenced.

Foster Park, Ottumwa, Ia., a 38 acre tract of land which was donated to the city for park purposes, was designed and laid out by Mr. F. E. Pease, landscape gardener, of Des Moines. In topography it is finely adapted for general park work, of which the designer has taken advantage. It has three entrances, with the chief objective point a commodious pavilion. A formal garden is arranged at the west of this with pergola, etc., while on the east are the playgrounds, with wading pool and accessories for gentle sport. Toward the northeastern entrance is the highest point, with its Look-out building, which, while not a high structure, commands beautiful views. It serves as a rest house and shelter. This park will be an important feature in the park and boulevard system as planned.

The offer recently made to the city of Albany, Ore., by Mr. and Mrs. H. Bryant of a fine tract on Bryant's Island, to be used as a public park, has been accepted by the council. The land lies between the Calapooia and Willamette rivers and is reached by a bridge. The donors stipulate that the grounds are to be under the control of the Chautauqua Association during the period of the annual assemblies, and the association is to construct an adequate building thereon. The city is to keep up the roadways and expend \$5,000 in improvements within the next five years. It will be known as Bryant's Park.

The common council of Philadelpha, Pa., recently passed a bill authorizing the purchase of the old grounds of the Belmont Cricket Club in West Philadelphia for park and playground purposes. The tract consists of nine and one-half acres and will cost between \$200,000 and \$250,000.

Spokane, Wash., recently voted to spend \$1,500,000 for parks and boulevards. The proposed "Apple Way" boulevard, to be planted with apple trees, runs from Spokane to Cœur d'Alene, Idaho, a distance of 35 miles.

Houston, Texas, is to spend \$10,000 to continue the campaign of civic improvement.

Kingman, Kan., is to acquire the park and grounds now owned by the Cattlemen's Association. The city voted \$2,500 bonds for the purchase of the land.

Packard Park, the new park of Warren, O., the gift of W. D. Packard, a successful manufacturer of that city, is an ideal spot for a park, located not far from the business center and on the banks of the Mahoning river. It comprises some 43 acres, and Mr. Packard has agreed to give \$4,000 toward the improvements of the property.

The Borough Council of Garwood, N. J., has accepted the gift of a plot of land for park purposes.

The business men of Albany, Ore., have offered a tract of 14 acres to the city on condition that the city spend \$1,000 a year for five years in improvements.

A new north side park of about 40 acres has been decided upon by the park commission of Cincinnati, O.

A state park and game preserve will in all probability be added to the park areas of Missouri. It is located in the Hahatonka valley It has great scenic attractions.

Point Defiance Park, Tacoma, Wash., will be developed on natural lines, the recommendations of Mr. Sid J. Hare having been practically accepted.

West Side Park will be a new park in Richmond, Ind., an appropriation by the city council having recently been made for the purchase of four acres in that district.

The Redlands Park Commission, Redlands, Cal., have begun the work of improving the new \$80,000 park recently purchased by the city. A five-acre playground, also a recent acquisition, will be the first to be taken care of to completion.

Jackson, Ga., will soon have a park, the well-known local spring, "Chilly Rock," being on the tract.

Presque Isle, Pennsylvania's only harbor on the Great Lakes, is to be converted into a park, according to plans formulated by the State Department of Fisheries, indorsed by the Legislature and approved by the United States engineers. A bill was introduced into the Legislature in March

providing for an appropriation of \$50,000 to carry out the preliminary work the first year.

At a recent village election in Newago, Mich., a proposition to borrow \$1,000 for the purpose of buying the old court house square for park purposes was carried.

Park Superintendent McCollom of Paterson, N. J., recently submitted to the mayor plans for the making of six street parks out of little plots of land in different parts of the city, which have been or will be acquired. The plans call for an expenditure of about \$3,700 and were approved.

The Punxsutawney, Pa., Land and Improvement Association deeded to the Playground Association about three acres of land to which is to be added another acre or so by purchase, for the purpose of creating a complete children's playground, which it is designed shall be the best equipped and most up-to-date in that part of the state. A clause in the deed of transfer includes this dedication: "To the children of Punxsutawney in perpetuity."

Charles T. Ballard, S. Thruston Ballard and R. C. Ballard Thruston have donated to the Board of Park Commissioners, Louisville, Ky., for use as a public park and playground, thirteen and a half acres of land. Twelve and a half acres of the ground, known as the old Almstead Churchill farm, was granted in 1784 to Col. Churchill, who served as colonel of militia of Fauquier county, Virginia, during the Revolutionary War. One acre of ground, known as the Churchill family burying-ground, has been in the possession of the Ballard family for more than a century.

PARK IMPROVEMENTS

A section of the river front of Ashland, Ky., is being parked and much gratification is expressed at the improvement.

In reply to popular demand of the Oak Lawn residents, South Pasadena, Cal., the trustees have planned to improve the park property on the eastern boundary of that section. It has been an eyesore and dumping ground hitherto.

The trustees of Dorris, Siskiyou county, Cal., are improving the town park.

The work of improving the city park of Azusa, Cal., is progressing rapidly.

Perkins Park, the only public breathing spot of Brockton, Mass., and which was bequeathed to that city 50 years ago, is at last to receive some specific

attention. For some reason or other the authorities have neglected it, although it has for a long time been a popular resort.

Rawlings Park, Wymore, Neb., is being improved under the care of Edward J. Koenig, of Beatrice.

The Ann Arbor Railroad has offered to the city of Cadillac, Mich., a strip of land along the lake shore for use as a public park. The strip is about 800 feet long and varies in width from 200 to 300 feet. It is at present used as an alley and is covered with an unsightly line of boathouses. The mayor will take up with the city council the plan of beautifying the prospective park ground.

Mr. Howard Evarts Weed, landscape architect, Chicago, has furnished plans for improving Court Square, Tyler, Texas.

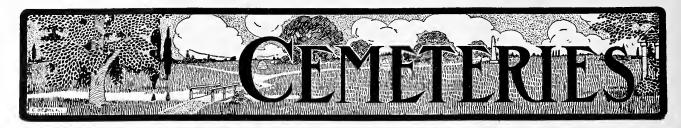
John T. Withers, Inc., landscape architects and foresters, of Jersey City, N. J., have been successful in the acceptance of their designs for a new city park for Huntington, W. Va., as well as for a boulevard and addition to the present city cemetery, work on which will soon begin. The firm has recently completed designs for Montgomery Park, Jersey City, for which a bond issue of \$300,000 was made.

PERSONAL

Mr. George H. Hazzard, of St. Paul, Minn., who for a number of years was superintendent of the Interstate Park at Taylor's Falls, and who took a prominent part in developing it, has again, after an interim of four or five years, been appointed superintendent of the park.

Mr. Myron H. West, landscape architect, has resigned his position as superintendent of Lincoln Park, Chicago, to take up independent professional work again. He is located at 815 Steinway Hall, Chicago. Mr. West has recently designed and patented a concrete electrolier, suitable for civic lighting and street naming. The globe holders and street sign letters are of bronze. On boulevards the posts may be made especially attractive with climbing vines.

As an addition to the article on "City Planning" in the April issue, there may be added that the plans for Baltimore, Md., were made by the late John M. Carrere, Frederick Law Olmsted and Arnold W. Brunner. The plans for Grand Rapids, Mich., were designed by Messrs. Carrere and Brunner, and a set of plans for the improvement of Rochester, N. Y., by Arnold W. Brunner and Frederick Law Olmsted.



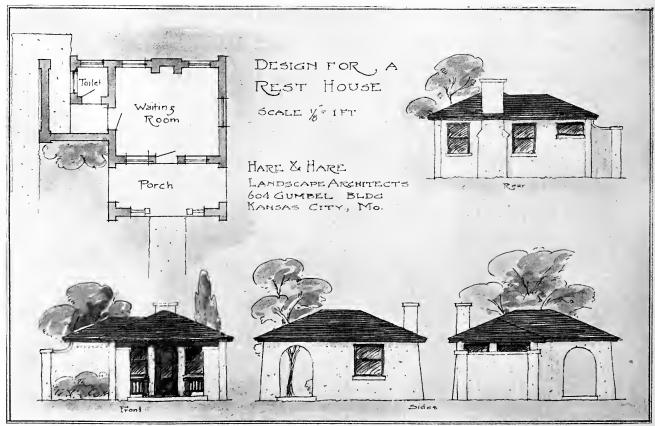
TYPES OF SIMPLE INEXPENSIVE SHELTER HOUSES

In the requests that frequently come to Park and Cemetery for suggestions for shelter houses, the demand seems to be chiefly for structures of simple architecture that can be economically and easily constructed, and of such an unobtrusive character as to be inconspicuous in the landscape and harmonious with their surroundings. Simple rustic structures of wood, brick, brick covered with stucco, or of monolithic concrete, are often effectively used, and we show here some examples of such houses that have been built at a minimum of expense with the use largely of native materials and the labor most easily available.

In many cases where the cemetery has landscape features that are distinctive, the shelter house might well be located in such a way as to draw the attention of visitors to these interesting places in the grounds, and thus enhance the value of the cemetery picture. Striking in-

stances of this use of the shelter house are seen in two of those illustrated here, the Summit House in Woodland Cemetery, Dayton, O., and the two shelters tucked into the cozy little valley that gives its name to Valley Cemetery, Manchester, N. H.

The quaint little rustic summit house in Woodland Cemetery is unique in its character and usefulness. It stands on the highest point in the cemetery, and overlooks the entire city as well as the valley, the encircling hills to the west, north and east, and points distant as far as the eye can see. This building, constructed along practical and symmetrical lines, is one of the beauty spots of the grounds, and thousands during the year climb the winding stairway to the tower floor above and are well repaid with the magnificent landscape picture that meets the eye in all directions. The hill upon which the house is built is one of the highest in the range of bluffs about the city. The base of Summit house is 210 feet above the level of Library Park, according to measurements made in 1865 by Samuel Forrer, one of Dayton's pioneer surveyors and engineers. The house itself was built in 1870, under the direction of a Mr. Kidd, a landscape gardener, and was constructed at a cost of \$2,200 of rustic wood collected from forest trees cut on the ground. It is octagonal in plan, 12-6 inside and 18 feet on the outside. The floor is paved with boulders, laid to form various designs. Superintendent J. C. Cline, who has been connected with the cemetery since 1856 and its superintendent since 1869, has carefully guarded the wooden structure as far as possible from destruction by fire or mutilation by the knife of the visitor and sightseer. The rustic Summit house, perched high on the hill and bearing the brunt of every storm that swept over the



hills for thirty-seven years past, has grown old and weather-beaten, and unless rebuilt in a measure, or a new one erected in its place, the building within a brief period will not bear the weight of the throngs that oftentimes crowd its stairways, and must eventually be closed.

It is possible, however, that a new and towering structure, built of grayheads and cement, may within a year or so be erected upon the site of the present structure. Rumor has it that a citizen who, desirous of building some memorial to the memory of a dead member of his family, in addition to a monument, has in contemplation the building of such a structure and presenting it to the cemetery association. Such a memorial would be noted and enjoyed by thousands and would be remembered forever in the name of the donor. Nothing definite has, however, been arranged in this direction.

Valley Cemetery, Manchester, N. H., has erected two little rustic wooden



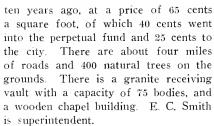
UNIQUE RUSTIC SUMMIT HOUSE. Woodland Cemetery, Dayton, O.



CLASSIC SHELTER OF CONCRETE. Thornrose Cemetery, Staunton, Va.

shelters in the charming little wooded valley shown in the picture, and their simple character and the manner in which they have been made a part of the landscape may be seen in the illustration of the one in the foreground that is covered with a luxuriant growth of climbers and almost hidden by shrubbery. These shelters cost about \$300 each.

The valley seen in the photograph is about 600 yards along and 300 feet wide, and is traversed by a little brook over which a rustic bridge has been built. Valley Cemetery is controlled by the city, and includes twenty acres, with a total of about 7,000 interments, a yearly average of about 100. There is about \$70,000 in the perpetual care fund. All the perpetual care tract was sold



Hare & Hare, landscape architects, of Kansas City, have prepared original designs and plans for a graceful and substantial little shelter house, for which they can furnish working drawings and specifications. They suggest that the structure, which is illustrated herewith be built of brick covered with stucco. For this purpose cheap second-hand



RUSTIC SHELTER WITH EVERGREEN BACKGROUND TO SHUT OUT UNSIGHTLY WALL, TORONTO, CAN.



TWO RUSTIC SHELTER HOUSES IN THE VALLEY. Valley Cemetery, Manchester, N. H.

bricks are as good as new. Cement blocks, as a rule, not only look cheap, but are unsatisfactory. A cheaper construction yet would be wood, covered with wire lath and plaster. This is fairly satisfactory for a long time, but is not so permanent as the first mentioned construction.

The rustic shelter is one of the cheapest and easiest types to construct with cemetery labor, and may be so covered with vines and made attractive with planting as to become an ornament to the landscape if it is placed in appropriate surroundings. Mr. W. H. Foord, superintendent of Mount Pleasant Cemetery, Toronto, Can., sends us photographs of two simple rustic structures that he built, of which we illustrate one. The first one was built two years ago just opposite the entrance to accommodate

people waiting for the cars. It was so much appreciated that they erected another one of the same kind inside the cemetery grounds. This one, shown herewith, has protective curtains that may be drawn down to the seats in stormy weather. As may be seen, Mr. Foord has planted evergreens to hide the building that shows a rather unprepossessing wall behind the shelter.

A small rustic shelter that is little more than a seat is illustrated in a recent issue of the Craftsman. It is illustrated here, and the following directions for its construction will be comparatively easy for any "handy man" to follow:

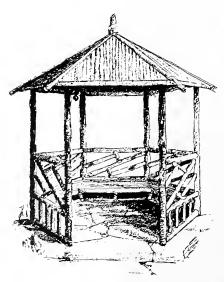
The design shows a covered seat made in the form of a hexagon, with one of the sides left open to serve as an entrance. It is large enough to seat several people comfortably. As illustrated here the proportions of this design should approximate 8 or 10 feet

wide, 8 feet high under the eaves, and the roof should have about a 4-foot pitch. uprights should be set on rocks and connected with frame at top and bottom. frame at the top should set on top of the uprights, and the roof on top of this. Then strips should be extended from the top frame of one upright to another. These strips should be halved in the center, thus keeping all the uprights in place, so that the weight of the roof will not cause them to separate. These corner-pieces extend from the point of the roof past each corner upright. The under parts of these corner strips in the roof are notched, and fit over the tops of the strips that connect with the tops of the uprights. Holes should be bored in the uprights and the strips, and wooden pins driven through. The point of the roof is connected to a finial. Strips should then be extended from the corner roof pieces to the lower frame of the roof. These strips should made of branches of trees split in half. Underneath is another set of branches split in half, set so as to allow the top branches to overlap the under ones in the same manner that shingles on a roof are laid. The seat should then be built around the inside, about 17 inches high and 15 inches deep. The supports for the seat extend back at an angle from the front of the seat to the floor, and should be fastened to the lower strips. The ends of these supports are gouged out in a concave shape, so that they will fit firmly over the round surface of the strips to which they are connected.

Another of our illustrations shows a rustic shelter of somewhat similar design that has been made more attractive by planting.

Quite a different type of shelter is the classic pavilion recently erected in Thornrose Cemetery, Staunton, Va., illustrated in a recent descriptive book issued by that cemetery, from which we reproduce it.

The pavilion, which was completed last August, commands a splendid view of the grounds. It is severely plain, the design being pure Greek, and it is a fine bit of architecture. To the back is a group of Italian marble figures, two male and two female, which represent the seasons, spring, summer, autumn and winter. These were given by Mrs. C. M.



CRAFTSMAN DESIGN FOR SMALL RUSTIC SHELTER.



SMALL RUSTIC SHELTER IMPROVED BY PLANTING.

Marquis, of Staunton. At the entrance to the pavilion is a rough block of granite on which is carved the words "Art Thou Weary?" the structure itself giving the invitation to step within and rest. The chief attraction of the building is the symbolical figure within. It is that of a seated draped figure symbolizing Rest or Meditation. The figure is life size and is the work of F. Barnicoat, of Quincy, Mass., and is cut from a block of close grained Westerley granite. The pedestal is of Quincy granite.

The columns of the pavilion itself are of concrete, and the roof of green tile. The valleys of the roof are of copper to avoid rust and the necessity of repair. A cement walk will be laid around the building, with a landing in front, and steps on all four sides. A driveway now encircles the plot on which the pavilion stands. The erection of the pavilion and the placing of the figure is the work of City Treasurer Arista Hoge, president of the Cemetery company, and is a part of his work of beautifying the cemetery grounds.

Thornrose Cemetery has recently issued a handsome descriptive book of the grounds showing several views of the rest pavilion. One taken from the east side shows the four statues representing the seasons and conveys the best idea of the picturesque location of the pavilion on the top of a hill from where may be seen much of the grounds and the surrounding country.

ASKED and ANSWERED

An exchange of experience on practical matters by our readers. You are invited to contribute questions and answers to this department.

Weed Killers; Grass for Shady Places

M. A. C., Montclair, N. J., asks: (1) What is the best way to kill chick weed on a lawn? (2) What kind of grasses do best in shady places?

Ans.—(1) Ammoniated Lawn Lime, made by the Superior Chemical Co., Louisville, Ky., is said to be effective for all flat leaved weeds.

A. R. Gross, superintendent Mt. Greenwood Cemetery, Chicago, writes on the subject as follows: The worst of all broad leaved weeds is the Dandelion. Experiments for its eradication have been carried on by the writer during the past year. He who has this "pest" simply within his own grounds has a much lighter task than the one whose place is surrounded by fields covered with it and where no attempt is made toward checking its spread. In the case of the former, weeding nearly always accomplishes this end, but in the latter entirely different methods must be resorted to. First of all, heavily massed border planting prevents many of the seeds from being carried into the grounds by the wind. Unless something like that is done your fight against its spread will be a continuous performance.

That barrier being provided, the next thing is to attack within the grounds. The writer has applied by means of a force pump and spray nozzle the Sulphate of Iron solution mixed in proportions of two pounds of the Sulphate to one gallon of water. This was applied very lightly

last summer and fall several days after cutting and the result was very satisfactory—the leaves of the dandelion within forty-eight hours turning entirely black. The grass did not suffer to any great extent, being slightly discolored for only a few days.

Spring application has not been made, but the effect produced upon the mature leaves indicates that the destruction to the tender shoots will be considerably greater, thus leaving the plant without foliage a large part of the summer. The writer is firm in his convictions that by at least two applications a year the plant can be kept almost entirely defoliated and by repeating this drastic treatment upon this biennial several years in succession its eradication can be accomplished.

(2) Try the lawn grass seed known as the "Deep Shade Mixture." for sale by seedsmen.

Thinning Row of Cedars

B. A. Auburn, Neb., writes: On one side of our cemetery we have a row of red cedar, Juniperus Virginiana trees, planted 4 feet apart; now are 15 feet high, never have been trimmed. They are thrifty. What, if anything, shall I do with them?

Ans.: I should leave the cedars alone, unless they are crowding each other, and if so, a trimming will remedy this. Cedars stand trimming well, but if crowded too much they are liable to be injured at once by fungus.

JENS JENSEN.

Fighting Grub Worms

J. A. R., Jackson, Mich., asks: What will destroy grub worms that work in a lawn?

Ans.: Grub worms are the larvae form of the "May Beetle," so common during the month of May and early June. Practically nothing can be done on a small lawn space, but in a park lawn badly infested, it is best to plow it up in November, work it over with a harrow early in the spring and reseed. In this way most of the larvae will be killed during the winter.

H. E. WEED.

Water Works for Small Grounds

Editor, Park and Cemetery: In your March issue you have an inquiry as to the best system of water works for a small cemetery. There is no doubt that the most satisfactory for small cemeteries, parks and private grounds is what is known as the pneumatic system.

This system is composed of a steel tank placed in a cellar or buried below the surface of the ground. The tank is so arranged that the upper third of the space is filled with compressed air and the lower two-thirds with water. The compressed air forces the water out of the bottom of the tank into the mains. As the tank is refilled with water the air is again compressed against the upper space.

To many this seems complicated, but when understood is extremely simple. The power to pump can be a hot air engine, a gasoline engine; or an electric motor. When electricity is to be had the pumping can be made entirely automatic. That is when the water gets low in the tank the electricity is turned on and as soon as the water rises to a certain point the electricity is shut off. This system has the advantage over an overhead tank system, because, first, it is as cheap to install; second, it is easily made frost proof, and, third, it has no unsightly tanks to mar the landscape. These systems are successful up to a capacity of 3,000 gallons an hour and I have just heard of one being installed at double that amount.

Bellett Lawson, Jr. River Grove, Ill.

Destroying Wild Carrots

Mrs. B. A. M., Emlenton, Pa., asks: How do you destroy Wild Carrot?

Ans.: Dig it out before it goes to seed or sow a heavy crop of oats and clover, which should kill it out.

J. W. W.

LANDSCAPE PICTURES FROM TWO CEMETERIES

On these pages and on the cover we show, this month, several more specimens of the art of making land-scape pictures in the cemetery in illustrations from the books issued by Woodlawn Cemetery in New York, and Alleghany, of Pittsburgh, that have been mentioned in these pages recently.

The Louise Constable lot in Woodlawn, illustrated on this page, is a fine example of how a unified and pleasing picture may be made from an individual lot with the aid of a proper landscape plan and careful attention to the problem in hand. The planting plan for this lot was furnished by Olmsted Brothers, of Brookline, Mass., and the naturalistic landscape effects they have secured are worthy of careful study. The Virginia red cedar is made prominent in the scene, and the rockery is planted with secures, junipers,

phlox and a variety of creepers. The monument is of Barre granite and is a distinguished example of the popular type of Celtic cross.

The picture on the cover, also a scene in Woodlawn, shows the white dogwood in bloom. The fine specimen of this rare bloomer is skilfully placed on the lawn to lend color and variety to the cemetery scene and contrast well with the heavier vegetation in the background.

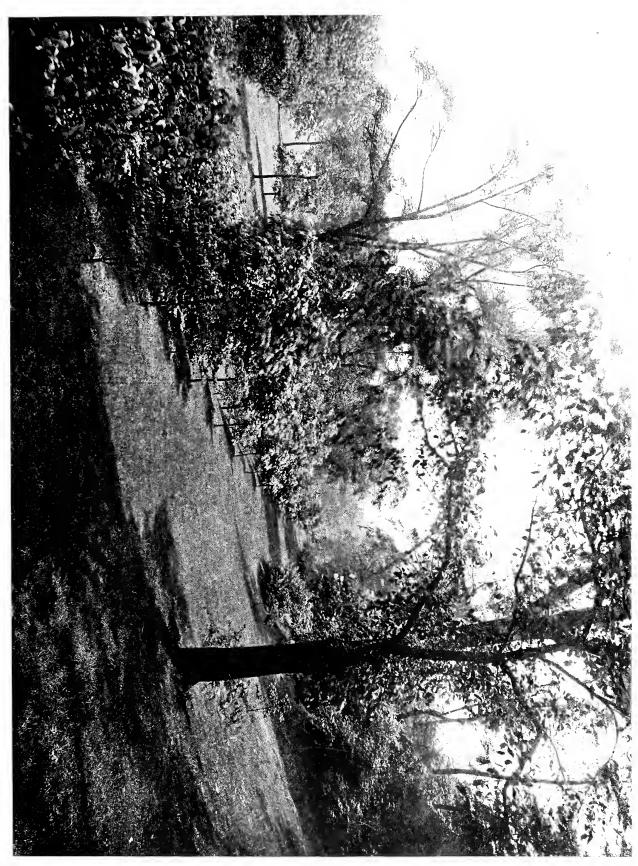
On the opposite page is a view of what is known as "Lover's Lane" in Allegheny Cemetery. It is a most striking and picturesque effect in informal avenue making. The grass walk, and the well-chosen planting that emphasizes the length and outline of the pathway are as park-like and peaceful as any scene that could be imagined in a park. The park effect is further enhanced by the fact that there are no monuments or anything suggestive of the cemetery in sight.



WELL PLANTED LOT
IN WOODLAWN CEMETERY, NEW YORK,
DESIGNED BY OLMSTED BROTHERS,

BROOKLINE, MASS.

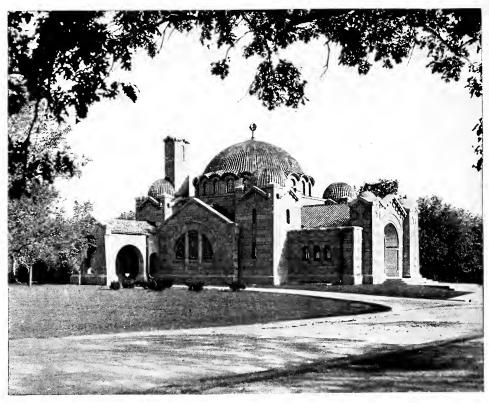




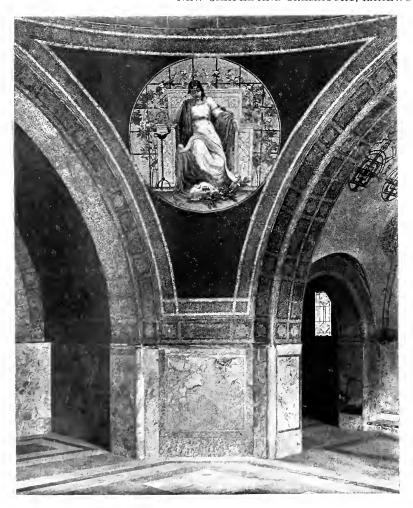
LAKEWOOD'S NEW CHAPEL IS A MODEL BUILDING

One of the finest buildings devoted to cemetery uses in America is the new chapel and crematory of Lakewood Cemetery, Minneapolis. It is especially notable for the richness and artistic quality of its interior decorations, and in this respect, probably, is surpassed by no similar structure in America.

The construction of Lakewood chapel represents to a most perfect degree the three architectural requisites: permanency, sanitation, and artistic beauty. Permanency in the granite foundations



NEW CHAPEL AND CREMATORY, LAKEWOOD CEMETERY, MINNEAPOLIS.



"MEMORY"; DETAIL OF MURAL DECORATIONS, LAKEWOOD CEMETERY CHAPEL.

and walls; sanitation in that each part of the interior can be perfectly and easily kept cleaned; and beauty, because in the embellishment of the interior the mosaic and marble is designed and set with an artistic skill that has not been surpassed in this country.

The design of the building was executed by Architect Harry W. Jones, of Minneapolis. The interior decoration, in its harmonious combination of mosaics, marble and bronze, was designed and placed under the direction of Charles R. Lamb, of New York. The construction was by Pike & Cook, Contractors, of Minneapolis; and it is desired that these who have produced this monumental work, that will long stand as one of the most notable architectural creations of its generation, may each be credited with his part in its completion.

In considering a proper style of architecture for the chapel, the architect sought a form which, while harmonizing with its monumental environment, should as little as possible interfere with the landscape beauty of the site. Thus the broad reposeful masses of San Marco at Venice and St. Sophia or Constantinople suggested the byzantine Romanesque as a most appropriate style to be followed, especially as the Romanesque character of the entrance gateway and lodge called for similarity in design.

The materials selected were of the

most imperishable nature. The walls are of reddish gray St. Cloud granite. The dome and roof are of Gustavino tile, with an outer covering of Spanish wall tile embedded in elastic cement. The interior finish is a most interesting and valuable example of the mosaic artist's art, the walls, ceilings and dome being designed and executed in Venetian mosaic imported for the purpose, and set by Italian artists of great ability. These mosaic decorations are set off by a harmonious combination of marbles in floor, wainscoting and stairs.

The front entrance doors are of solid bronze, ornamented in low relief; all other doors being of copper, as are also the window frames and sash. These are glazed with art glass mosaic set in the metal.

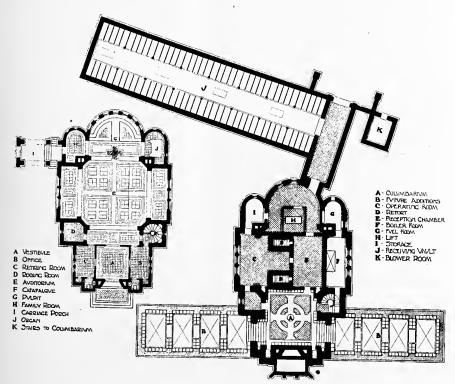
The interior cornice at the base of the dome is of Teco pottery, the inscription being modelled in clay and inlaid with gold mosaic.

The electric lights are concealed in the cornice and back of the arches, and furnish a reflected light. The heating and ventilating system is concealed behind marble and metal grill work. A hydraulic lift connects the chapel with the crematorium, the reception room of which is finished in white Italian marble.

The front portion of the basement is to be finished as a columbarium with catacombs and niches for incinerary urns as the custom of cre-



GENERAL VIEW OF INTERIOR, LOOKING TOWARD ALTAR, LAKEWOOD CEMETERY CHAPEL.



GROUND PLANS, LAKEWOOD CHAPEL AND CREMATORY.

mation shall increase its demand. In fact, the design of the mortuary chapel is such that as the future may demand, subterranean extensions can be made, and each generation find that its mortuary requirements have been anticipated as far as possible in this initial effort to provide a model chapel and crematorium for burial uses that is beautiful and convenient as modern art and skill can produce.

The following brief quotation from the address of Charles R. Lamb, the decorator of the interior at the dedicatory exercises, gives some other interesting facts about the interior of the structure:

"My mission, if I had one, would be to tell you something about all the work that the interior represents. I would like, if there were time, to speak of the beautiful things Mr. Jones, your architect, selected in marble from Venice, of the great cathedral, and to tell you more about the work there which has been going on in mosaic since the early times. I would like to make personal to you

(Concluded on page XVIII)

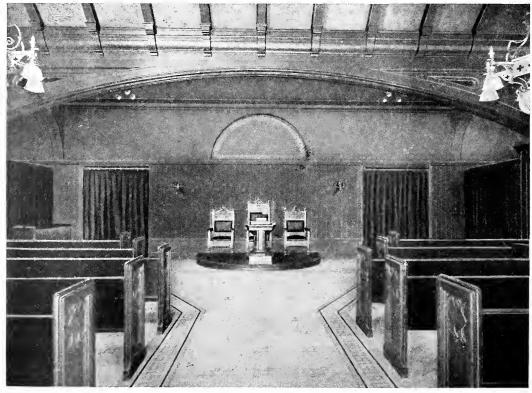
PERFECTING DETAILS OF CREMATORY SERVICE

Cremation has now become an established fact in the United States. Since the first incineration took place in Pennsylvania in 1876, the practice has been steadily increasing, until now crematories may be found in all parts of the country and the demand for their use is wide among all classes of people.

The perfection of detail in handling the operation itself has been largely responsible for this result and nowhere has more careful atten-

hot water heat and retiring rooms and a glance at the photograph will indicate the superb character of its finish. The colors and hangings are rich and restful and it is designed in every way to extend a gentle influence to those who make use of it. The room is of ample size and seating capacity and a system of exhaust ventilation keeps the air at all times pure and wholesome.

In the corridor of the Oak Woods Receiving Vault the visitor will note parties using the Crematorium. It is spacious and high-ceiled and like all parts of the building, perfect in ventilation. Daylight is admitted through windows of beautiful artglass, rendering a subdued atmosphere of peace and quiet that is not lost on short Winter days when the pleasant glow of the electric lamp is substituted. Ample seating is provided for all ordinary demands and because of the more intimate character of its comforts, this room is fre-



INTERIOR OF CHAPEL, OAK WOODS CEMETERY, CHICAGO.

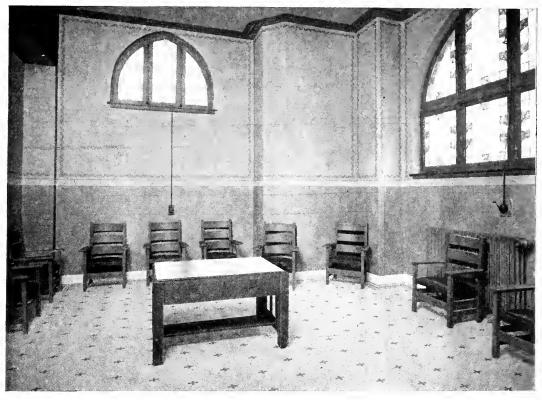
tion been given to every detail of service than in the new crematory of Oak Woods Cemetery in Chicago. We have previously given in these pages a description of the crematory furnace, and the methods of operation, and have illustrated the retorts, which 'are operated exclusively by natural gas. The illustrations here give some further idea of the arrangement and furnishings of the chapel and the other rooms that pertain to the crematory.

The chapel at Oak Woods is an important feature of the cemetery. Its use is of course not confined to cremation funerals, but it is in demand at all seasons by those who have learned and appreciate its advantages and convenience. It is thoroughly appointed, with electric lights,

the unusual treatment of this part of the building, departing as it does from the old accepted coldness of stone and marble of vault interiors. The effort has been made to give warmth and cheer by the use of beautiful, rich draperies, so that the casket reposing here seems within the ken of human influence, not neglected in cold and damp surroundings. The rooms are all pleasantly lighted by electricity. The air is changed throughout the vaults regularly, by a motor-driven exhaust fan, insuring comfort and safety to visitors. A vacuum cleaning system is used throughout all parts of the building, so that even the remotest corners of the vaults are scrupulously clean.

A handsomely furnished reception room is at the disposal of funeral quently preferred to the larger and more formal Chapel for private and family services.

In the preparing room is where the friends gather to witness the deposit of the casket in the retort. It is here that the observer forms his impressions of the Crematorium and incidentally of the process of cremation. The room is airy, light and finished in gratefully cool colors, and it is doubtful if more comforting surroundings could be conceived of wherein to surrender the mortal remains of a friend. There is no suggestion of noise or machinery of any kind. The two small doors at either side of the central door in the illustration admit the casket to the retort. The burners are not ignited till after the casket is in, and the doors closed,

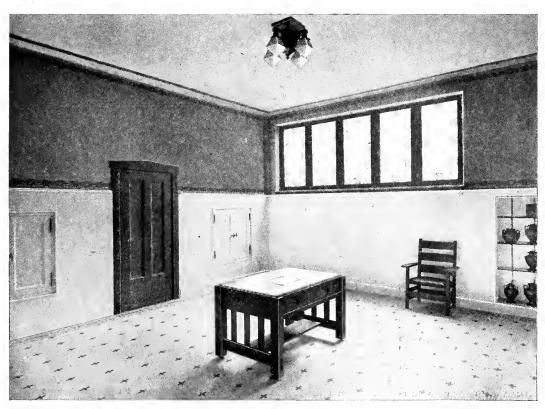


CREMATORY RECEPTION ROOM, OAK WOODS CEMETERY.

so that all the observer sees is the pure white interior of the casket receptacles.

Advanced methods now impose certain requirements in the conduct of an incineration, having to do with sanitation and due regard for the sensibilities of those interested. In the Crematorium at Oak Woods these conditions are all complied with. The working parts, the retorts and machinery were all carefully selected

and installed. The best advice was sought and the best talent employed in the construction of everything connected with the place. The fuel employed is natural gas and electrical power is used to furnish a supply of



PREPARING ROOM, OAK WOODS CREMATORY.

air in large quantities to the retorts, so that perfect combustion is assured. To preserve quiet about the edifice, the machinery for this air supply is placed in a building several hundred feet distant and the air taken underground to the retort room. With a few minutes' preparation a temperature of 2,500 deg. F. may be secured in the retorts and this is so perfectly applied and under control that the eye of the attendant may be within a few inches of this intense heat and the outer surfaces of the retort give no indication of its presence.

In response to requests that a suitable place of interment be provided for urns containing cremated remains, some of the best locations in Oak Woods Cemetery have been subdivided for this purpose.

The object is to allow sufficient area for the burial of the urn and a symmetrical marker for the spot, and to provide perpetual care for the surroundings.

Where something more durable in material and better workmanship is desired than are found in the Urn furnished with a cremation, Bronze Urns, ranging in price from \$20 to \$75, are sold.

Cremation Certificates are issued by the Association and can be procured at the city office. The form or permit for cremation reads:

The Oak Woods Cemetery Association is
hereby requested to incinerate the remains of
on
hereby certify thathave
charge of the remains of said
fromrelated to the de-
ceased as

On the reverse side are printed the following rules:

The Oak Woods Cemetery Crematorium is built in connection with the chapel and vault and is ready for use at any time except on Sundays.

Applications for incineration can be made at the Cemetery or at the city office of the Cemetery Association.

When an incineration is desired an order to that effect, signed by the person whose body is to be incinerated or by the relative having charge of the body, must be deposited at the Cemetery. Blanks for this purpose can be obtained at either office of the Association.

It is believed that every incineration should be conducted in as private a manner as possible and not serve to gratify morbid curlosity. Therefore but three persons in addition to the regular attendants will be admitted to the Crematory at the time of the incineration.

No special preparation of the body or clothing is necessary. The body is incinerated in the casket as received.

One day's notice is required when the use

of the Crematory is desired, and the ashes may be obtained the day following the incineration.

The charge for an incineration is thirty dollars. This charge includes a receptacle in which to place the ashes. It is believed that burial in a family lot will be the most satisfactory way to dispose of this receptacle.

Oak Woods has recently issued a handsomely printed brochure illustrating and describing the chapel and crematorium that is a model of good taste both in matter contained and in manner of execution.

OHIO CEMETERY MEN TO MEET

The tenth annual convention of the Ohio Association of Cemetery Superintendents and Officials will be held at Marion and Delaware June 21 and 22, with headquarters at the Marion Hotel, and meetings in the Y. M. C. A. A very interesting program has been prepared.

In the program, the names to which stars are prefixed, are the authors of the papers who presented them at the National Association. The names following in parentheses are the state members who will read the papers at the meeting. Following is the program:

Roll Call; Application and Reception of New Members; President's Address; Secretary's Report; Communications.

Secretary's one-half hour to receive fees and dues.

Paper—"Superintendents and Their Responsibilities"*Timothy McCarthy
(W. H. Collins, Akron, O.)

Paper—"Mistakes in Cemeteries".....
*A. W. Blain
(F. C. Case, Norwalk, O.)

Question Box; Appointment of Committees on: Auditing, Resolutions, Location, Lunch. Wednesday Afternoon.

1:30 P. M.-Take cars at Hotel Marion for

Cemetery; Inspection of Cemetery. Evenlng Session. Banquet—6:30 to 8; Call to Order 8.

Paper—"Beauties and Benefits of Modern
Cemeteries"......*George H, Scott
(C. C. Crain, Portsmouth, O.)

(George Gossard, Washington C. H., O.)

Paper—"Some Winter Work in Cemeteries"
......*Bellett Lawson, Jr.

(John Perrin, Toledo, O.)

Question Box; Nomination of Officers.
Thursday, June 22—Call to Order 8:30 a. m.
Paper—"Care of Country Cemeteries"

*Ezra Downs

(C. W. Modle, Mt. Gllead, C.)
Paper—"Ohio Laws Regarding Removing
Bodies"....J. J. Stephens, Columbus, O.
11 o'clock—Take cars for Deiaware, Ohio,
where party will lunch.

Inspection of Cemetery and Ohio Wesleyan University; 3 o'clock, meeting Cemetery Chapel.

Paper—"Lot Enclosures"....*M. P. Brazili (Chas. C. Carroll, Cleveland, O.)

Report of Delegate to National Convention in Chattanooga.

Question Box; Report of Committees; Unfinished Business; Election of Officers.

Members and prospective members are requested to bring photographs and models of tools and implements used in their cemeteries.

OFFICERS OF THE ASSOCIATION.
President, George E. Whittaker, Youngstowns, O.

Vice-president, C. C. Crain, Portsmouth, O. Secretary and Treasurer, C. C. Anderson, Sydney, O.

LEGAL STATUS of LOT ENDOWMENT

The uncertain legal status of endowment funds and bequests in many states makes this one of the most perplexing of the cemetery's problems. West Laurel Hill Cemetery, of Philadelphia, has recently issued a leaflet to its lot owners, explaining briefly the legal status of the matter of endowment of cemetery lots in that state. It reads in full as follows: Concerning Endowment of Cemetery Lots.

The Act of May 26, 1891. Sec. 1, P. L. 119 F. D. Last Edition 559, provides: "No disposition of property hereafter made for the maintenance or care of any cemetery, churchyard or other place for the burial of the dead, or any portion thereof, or grave therein, or monuments or other erections on or about the same, shall fall by reason of such disposition having been made in perpetuity, but said disposition shall be held to be made for a charitable use."

This act indicates that it is the policy of this state to regard a trust for the care of a burial lot as a charitable use.

The lots themselves are exempt from taxation under the provision of Act of 5th of

April, 1859, Sec. 1, P. L. 63, Last Edition P. D. 564, as follows: "Whenever any lot or lots, or the right of sepulture therein, shall be granted to any person or family, by any lncorporated cemetery company, or church or religious congregation, within any common enclosure made by such company, church or congregation, as and for the purpose of the perpetual burial of the dead, every and all lots so disposed of or used for burial shall hereafter be free and exempt from all taxation so long as the same shall be used or held only for the purpose of a sepulture."

Under this act it was held that a reasonable provision for the care of graves of testator and his family and his cemetery lot is not subject to the collateral inheritance tax. (Fleck's Estate, 52 P. L. J. 67 1904)).

The Act of 5th of March, 1903, P. L. 12, P. D. 610, provides: (Sec. 1) "Hereafter all bequests and devises in trust, for the purpose of applying the entire interest or income thereof to the care and preservation of the family burial lot or lots of the donor, in good order and repair perpetually, shall be exempt from liability for collateral inheritance tax." (Hurst v. Cemetery Assn. 1 Lanc. L. Rev. 60 (1883); (Fleck's Estate, 52 P. L. J. 67 (1904)).

CEMETERY NOTES

A cemetery association was recently organized in El Dorado, Kan. The following officers were appointed: Mrs. A. G. Williams, president; Mrs. R. N. Benson, vice-president; Mrs. Bebee, secretary; Mrs. Dixon, corresponding secretary; Miss Mary Armstrong, treasurer.

The Meechem-Brittain Cemetery Company, of Mobile, Ala., have incorporated with a capital stock of \$16,000 all paid in. The company will operate Lincoln cemetery in the Burden mill tract district, west of Spring Hill avenue.

Waukegan, Ill., appears to be rapidly approaching the time when some attention must be paid to the question of cemetery accommodations. The city has only two cemeteries within its limits, which are filling up quite fast, so that the question will become a serious one before very long.

A bill was recently introduced in the New York Legislature authorizing Oneida to acquire cemetery lands in that city for the purpose of a public playground. The city is to provide for the removal and reinterment of the bodies buried in the cemetery. The bill provides detailed procedure for the acquiring of the property.

The ladies of the Federation of Women's Clubs, of Beloit, Wis., have taken the matter up of providing a more attractive name for the City Cemetery than the City Cemetery. The city public grounds committee are studying suggested names.

Rev. W. M. Tippy, pastor of Epworth Memorial Church, Cleveland, O., recently suggested to the Johnson memorial committee that Erie Street Cemetery be made into a park to be known as Johnson park, as a memorial to Tom L. Johnson.

The rumpus between the Union Cemetery Association and the city authorities of Kanasas City, over the ordinance passed last summer by the council prohibiting further burials in that cemetery, and opening a street through it. was recently practically decided by Judge O. A. Lucas, of the Circuit Court, who denied the association's application for a permanent injunction. The following occurs in the Judge's decision: "Under the right of eminent domain, if it becomes necessary for the public good, the city may open a passageway through this cemetery. It is purely a commercial proposition, such as a slaughter house or a powder mill,

It was built in a sparsely populated district, but now that the city has grown up around it the city assumes the right to control it. It is not proper to impugn the motives of the city council in passing this ordinance. It was passed for the general good. It is just another case of the greatest good for the greatest number."

Acting under a decree of the court in the equity case in which Cardinal Gibbons was made plaintiff, Walter D. Willson and Charles Alvey, trustees, sold the old Catholic graveyard on North Prospect street, Baltimore, Md., for \$5,300. A total of 804 bodies were disinterred from the graveyard and reburied in Rose Hill Cemetery. The court and other expenses, fees, cost of reburial of bodies, etc., amounted to \$1,-466.20.

Waukegan, Ill., is being exploited by the American Mausoleum Co., with a view to erecting a community mausoleum in that city. The Nebraska Mausoleum Co. is figuring on a 1,000-crypt mausoleum for West Lawn Cemetery, Omaha. The Rochester Mausoleum Co., Rochester, N. Y., has been incorporated with a capital stock of \$10,000, for the purpose of constructing and selling mausoleums. Lincoln, Ill., is being interested in a \$10,000 community mausoleum. The Glendale Cemetery Association is reported to have closed a contract for a \$15,000 concrete structure, to contain 124 crypts. Arrangements are consummating for the building of a community mausoleum at Sunbury, Pa., to cost not to exceed \$28,000. The International Mausoleum Co., of Chicago, according to the Milwaukee "Sentinel," has served legal notice on all parties or corporations having for their purpose the building of community or compartment mausoleums, that the International Company is the original inventor of this method of entombment, as well as the use of the community idea in this connection, and also a deodorizing system, and that anyone purchasing tombs of any one else than the International Company, or its representatives, will be made a party to any and all suits at law resulting from infringements on its patents. The International Company claims to have completed sixty mausoleums with 130 in process of erection.

Under a new ordinance of the Kansas City council, no new cemeteries

are to be opened within the city limits. Specifically the ordinance says it shall be unlawful for any person, firm or corporation to bury a human body within the city limits except in a cemetery now and at such time in use as a cemetery. It was explained that this will in no way prejudice the city's efforts to prevent any further burials in cemeteries now within the city that have become a menace and an impediment by reason of the city's growth around them.

Decree has been ordered by the Worcester county board of commissioners by which the tax levied by the Milford, Mass., assessors on certain personal property of the Pine Grove cemetery corporation is abated, the amount named in the abatement being \$1,249.50. According to this decree the proprietors of Pine Grove were assessed illegally on \$75,000 of personal property.

At the suggestion of Rev. Father Daniel Buckley, the trustees of the St. Raphael cemetery, Springfield, O., have taken up the project of improving the condition of the grounds. The cemetery is not as well kept at the present time as it should be, and after the improvements are made, it is probable that a caretaker will be employed to keep the grounds in order.

Since the city council of Pawtucket, R. I., provided that all payments for lot work in the city cemeteries should be made in advance, very little trouble is experienced in the collections; but under the old plan of credit some \$4,000 still remains on the books.

Pursuant to a recent call made by President Reese Carpenter, of the Druid Ridge Cemetery Company, Baltimore, Md., a large number of the unsecured creditors of the corporation attended a special meeting at which the consensus of opinion appeared to be that unless all of them act in unison against the plan of the receivers to sell the property at public auction, a number of lawsuits would be precipitated.

In a proposed ordinance drafted by the new commission of Racine, Wis., the following provisions on annual care and perpetual care are incorporated: "Every lot owner shall pay \$1 per annum for the care of a full lot and 50 cents for half a lot and certain amounts for other fractions of lots; that \$30 be paid for the care of a whole lot: \$15 for half a lot and so on down for fractions of lots, and these amounts to forever exempt the lots from assessment and the lots shall be perpetually cared for by the city." Experience shows this to be quite inadequate for the purpose in modern cemetery practice.

NEW CEMETERIES

Five acres of land in Plainfield township has been deeded to the Catholic Bishop of Chicago, to be used for a Catholic cemetery in Plainfield, Illinois, in connection with the new church which was started there a year ago.

Temple Emanuel, the Jewish congregation of Rabbi W. S. Friedman, at Sixteenth avenue and Pearl street, Denver, Colo., has bought 15 acres of land in Fairmount cemetery for the purpose of establishing a Jewish cemetery. The Jewish cemetery immediately east of Cheesman park will be vacated at once and the bodies will be removed to the new cemetery.

The city council of Holland, Mich., has decided to accept the offer of the Pilgrim Cemetery Association to take over the ten-acre cemetery and conduct it as a municipal burying ground. The city also takes over \$900, the balance in the treasury of the association, which has conducted the cemetery since its establishment in 1848. It is also planned to purchase an eight-acre tract next to the cemetery and combine the two properties. A number of improvements are planned for the cemetery.

Improvement work on the new Riverhurst Cemetery, Endicott, N. Y., is rapidly approaching completion, and the laying out in sections and lots will soon be undertaken.

The Oak Hill Cemetery Association, Belle Plaine, Ia., has bought four acres of ground for an extension. This association is composed entirely of women of Belle Plaine, and they bought the cemetery some years ago when in very bad condition and have since transformed it into an attractive spot, put in a waterworks system and cement sidewalk about a mile from town, built a shelter and a large yault, and made many other improvements. The additional acres afford much needed room.

The Baltimore Hebrew Congregation, Baltimore, Md., has bought the old Schone Inn., on the west side of the Belair road, adjoining the Congregation Cemetery. It will shortly be razed for an extension to the burial grounds. The property is one of the landmarks of the neighborhood, and was one of the favorite road hostelries during the stage coach period. The old inn, despite the ravages of time, is still in an excellent state of preservation and plainly shows the marks of its past elegance.

Forest Hill Cemetery Association, Fredonia, N. Y., with members in Fredonia and Dunkirk, has bought nine acres of land adjoining its property, from the estate of the late Judge George Barker.

CEMETERY IMPROVEMENTS

The Cemetery Board of Saginaw, Mich., has completed arrangements for a convenient waiting-room building to be erected just inside the Washington Ave. entrance of Forest Lawn Cemetery.

The annual spring cleaning in Vale Cemetery, Schenectady, N. Y., is about completed, and on a recent fine day an unusual crowd of visitors testified to the public appreciation of a beautiful place.

The Jewish Cemetery at Nashua, N. H., is to be improved this season. A receiving vault is to be erected and the cemetery generally cleaned up.

Some \$1,600 is to be expended on a road from town to Graceland Cemetery at Mitchell, S. D. In addition to this a better water supply is under consideration.

Members of the executive committee of the Lone Fir Cemetery Lot Owners' Association, Portland, Ore., have decided that no work shall be done on the cemetery grounds until sufficient money has been subscribed to insure the completion of the plan of improving and beautifying the cemetery, plans for which have been made by Howard Evarts Weed. The cemetery grounds will receive a thorough overhauling, roadways filled where they are low and below the grade, more shrubs and trees planted, and grass seed sown. Through the center roadway a large water main to insure sufficient water for irrigating purposes is to be laid during the summer months. No monuments or headstones are to be disturbed in any manner. Hedges and fences will be removed by the consent of the owners upon whose lots they stand. The movement inaugurated by the Lone Fir Cemetery Lot Owners' Association has nothing to do with the original company. The new association has been organized and is in charge of the grounds for the sole purpose of carrying out the plan of beautifying them, and all lot owners are requested to cooperate and join the movement.

It has been decided by the directors of the Hillside Cemetery Association, Middletown, N. Y., that a number of improvements shall be made in the grounds this season, among them the erection of massive stone pillars at the different entrances. A number of other minor improvements were also decided upon.

The Evergreen Cemetery Association, of Jacksonville, Fla., has recently been organized under a new charter. Under this new charter trust funds for the perpetual care of lots may be received and a certain percentage of the pur-

chase price may go into a trust fund for the maintenance of the cemetery after all the lots have been sold. Some thousands of dollars are to be provided for new buildings and improvements.

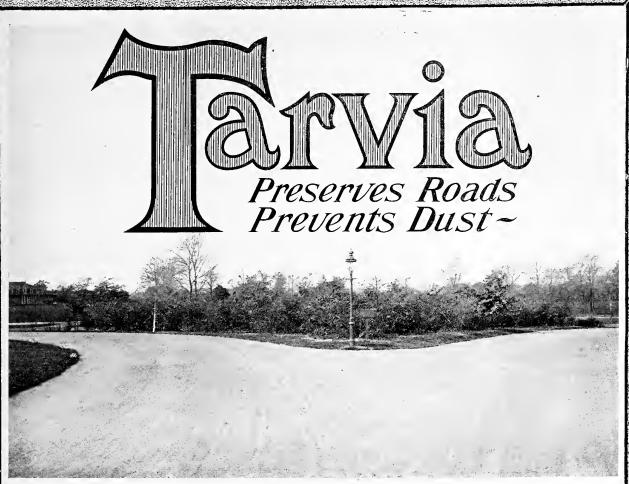
The annual statement read at the sixty-third annual meeting of the lot owners of Forest Hill Cemetery, Utica, N. Y., showed for the year ending March 31, 1911: Receipts from sale of burial lots, special care of grounds, dower beds, vases, etc., interment permits, \$28,213.49; interest from invested funds, \$2,518.57; and total receipts, \$38,-748.75. Included in the operating expenses were: Expense accounts, material and supplies, wages, labor items, sundries, \$23,246.64; improvements, new acquisitions, property accounts, land purchased, buildings erected, new fencing, \$6,347.86; total disbursements for year, \$29,594.50. Balance, cash on hand, April 1, 1911, \$9,154.25. The perpetual care or trust funds of the association were increased \$11,488 during the fiscal year, representing over a hundred new endowment funds. The superintendent's report, among other things, showed a total of 542 interments; 94 burial lots sold during the year; total lots sold to date, 3,701. Lots under perpetual care, 932; lots under general care, 875; total, 3,701.

CEMETERY REPORTS

The annual report of the Marion Cemetery Association, Marion, O., for year ending April 1, 1911, shows total receipts of \$18,344.73. This includes: lot sales, \$3,870.51; lot endowments, \$3,143.89; greenhouse sales, \$1,127.72; grave permits, \$878; stone graves, foun dations, etc., \$1,464.12; interest, etc. The expenditures included: labor and salary of superintendent, \$5,542.29; general expenses, \$1,941.11; sundries, \$976.85, which with other matters totaled \$8,677.29. The total cash assets amount to \$79,767.64, giving an increase for the year of \$9,667.44. The report gave much satisfaction. Mr. P. O. Sharpless, who was re-elected a trustee for a further term of three years, has now served the association for 46 years, and the officers were all re-elected.

The annual meeting of the Ottumwa, Ia., Cemetery Association was held May 1, and all the officers were reelected. Among the receipts for the year were: burials, care and other sources, \$2,902.38; lot sales, \$1,062.35; added to perpetual care fund, \$1,824.85. The perpetual care fund is now \$7,485.15 and the general fund, \$6,220.73. Number of burials during year, 177. A minimum price of \$2.50 has been established for setting headstones. Under, the supervision of Mr. S. W. Ru-

Continued on page XVIII



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An Index to articles on Gardening, Forestry, Park, Cemetery and Civic Improvement and kindred subjects in leading general and special magazines

Subscriptions will be received for any magazine or periodical at club rates with Park and Cemetery. Publications in which articles appear are listed below, and referred to by abbreviations, thus: S. L. 8:67-8, Feb. 09, means: Suburban Life, vol. 8, pages 67-8, February, 1909, Single copies should be ordered direct from the publications at addresses given below.

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Gardener's Chronicle of America, Jersey

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Examples of Modern Garden Art. Illust. (German.) G. K., 13:65-70. Apr., '11.

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A City's Control of Outlying Districts. Hon. John H. Gundlach. Am. C. 4:224-6. May, '11.

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F., 36:666-7. Apr. 22, '11.

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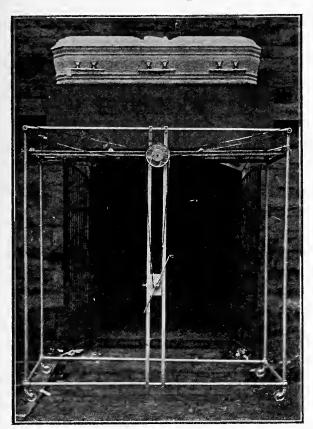
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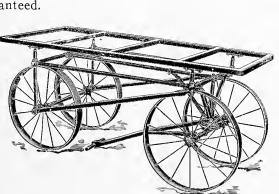
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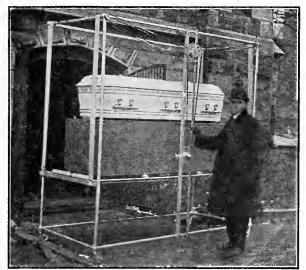
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BOOKS AND REPORTS

"Madison, a Model City," by John Nolen, of Cambridge, Mass., is the latest of the handsome city plan reports to be issued, and it sets a standard for these city studies that make it a work of the highest importance in our literature of city planning. No more thorough, comprehensive, elaborate or better prepared report of the kind has yet been issued. The book was prepared for the Madison Park and Pleasure Drive Association, of Madison, Wis., whose advanced and public spirited work in park development has frequently been noted in these pages. The work is more than an admirable guide for the future growth and development of this fine little city. It is an inspiration and model for other cities and a guide to city planners and workers in civic improvement wherever they may be. Mr. Nolen has exhaustively and intelligently studied every phase of the city's life, and fairly and frankly set forth its merits, defects and tendencies, and prepared plans for definite steps that may be taken to make it a more useful and beautiful city. The book is divided into six divisions whose titles will indicate the general scope of the study. They are: The Individuality of Madison; Madison as a Capital City; Madison as an Educational Center; Madison as a Place of Residence: The Future City of Madison; Supplementary Notes. It is permanently bound in boards, contains 168 pages and is illustrated with every manner of plan, drawing and photograph that might be of use in presenting the subject. There are carefully prepared maps of Madison, the surrounding country, the park system, and plans of parks and civic improvement enterprises in other cities. Many fine photographs of Madison scenes and views from other cities showing beauties that have been developed or pictures of civic institutions that might serve as models of what might be accomplished in Madison. The book is for sale at a price of \$1.00 by the Madison Park and Pleasure Drive Association through its secretary, Mr. Charles N. Brown, to whom inquiries for it should be addressed.

"Beautiful Thornrose," a handsomely illustrated, descriptive book, issued by Thornrose Cemetery, Staunton, Va., is well planned, handsomely illustrated with photogravure views and contains some admirable contri-

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A mixture of selected grass seed and animal manure, dried, purified and in highly concentrated form. All foreign matter absolutely eliminated; mixing is done by machinery; the proportions exact and based on the experience of expert Affords horticulturists. the positive means by which anyone, anywhere, can have green grass and a rugged turf, Cheaper, goes further than other

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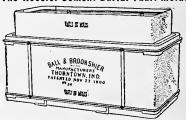
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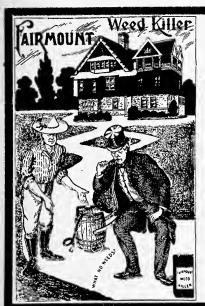
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butions of a historical and literary character from local citizens. One of the illustrations in the book, that of the new pavilion, is shown on another page in reduced form.

"Official Fertilizer Inspection," a bulletin of the Maine Experiment Station at Orono, Me., has just been issued.

The American Civic Association has issued a second edition of its bulletin on the "Smoke Nuisance," a good indication of the progress of the warfare on smoke throughout the country. Copies of the bulletin may be had for twenty-five cents, or cheaper in quantity, from Secretary R. B. Watrous, Union Trust Bldg., Washington, D. C.

Fairmount Park Art Association, Philadelphia, sends its thirty-ninth annual report giving proceedings of the annual meeting, list of members and of works of art furnished to Fairmount by this organization, and other information about its work. Leslie W. Miller, 320 S. Broad St., Philadelphia, is secretary.

From the Department of Agriculture: Agricultural Fair Associations, Circular 109, office of experiment stations; Natural Vegetation as an Indicator of Crop Production in Great Plains Area, bulletin 201 of the Bureau of Plant Industry; Spread of Gypsy and Brown Tail Moths Through Imported Nursery Stock, Farmers Bulletin No. 453; Surface Conditions and Stream Flow, Circular 176 of the Forest Service.

TRADE PUBLICATIONS RECEIVED

Illustrated Catalog of Coiled Spring Fence Co., Winchester, Ind.; Specials for 1911, circular from F. W. Kelsey Nursery Co., 150 Broadway, N. Y.; Illustrated Catalog of Philadelphia Lawn Mowers; Useful Hints for Road Rolling Engineers, booklet from Buffalo Steam Roller Co.; Specifications and Diagrams for Roof Construction from Barrett Mfg. Co., Chicago; Advertising Letter and sample plan from Wm. Stuppe Co., New York; Circular on Rhododendrons from Harlan P. Kelsey, Salem, Mass.; illustrated folders and circular from Electric Wheel Co., Quincy, Ill.; descriptive folder of ornamental iron and wire work · from McLaren Bros., Cleveland, O.: illustrated catalog of Water Lilies from William Tricker, Arlington, N. J.; handsome 132 page illustrated catalog of the nurseries of Bobbink & Atkins, Rutherford, N. J.; Everything for the Lawn, from Peter Henderson & Co., New York.



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Weeds are often undesirable in ponds, streams, rivers, lakes, etc. Please notice the simple and effective operation of the

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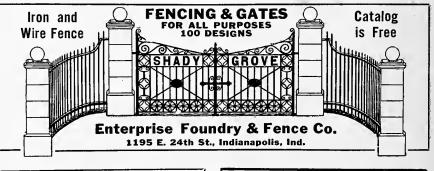
Silver Medals Austria 1909 Pueblo, Colo. 1910

and floating down stream. The device may be handled in lengths to a great extent from the banks, or just as well from boats on larger lakes. In use by many Parks and Cemeteries, and highly recommended here and abroad. Write for illustrated circular, references, etc.

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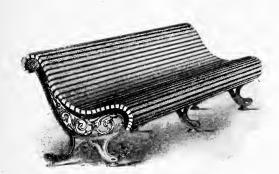
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Drinking Fountains

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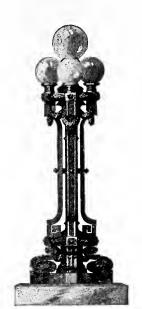
Electroliers and Posts

Flower Vases in Cast Iron

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Statuary, Settees and Chairs

Tree Guards

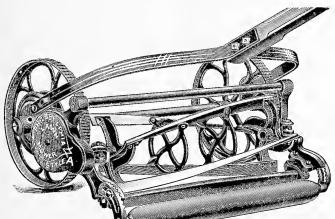


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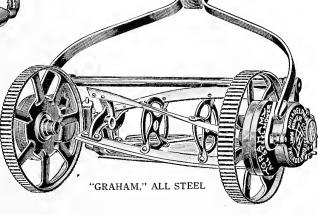
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PERSONAL

George H. Nye, chief draughtsman in the office of the city engineer of New Bedford, Mass., has been appointed superintendent of cemeteries. He succeeds Hulbert E. Thomas, who, realizing that the work required some engineering knowledge, voluntarily resigned and becomes assistant superintendent. The cemetery board has under immediate consideration the development of Pine Grove Cemetery, a tract of some 20 or 30 acres on Tarkiln Hill Road, made imperative by the fact that nearly all of Oak Grove Cemetery is occupied. The development of Pine Grove Cemetery will include the provision for two entrances, one from Acushnet avenue and one from Bowditch street, the latter thoroughfare cutting the cemetery in half. Mr. Nye is a graduate of the Massachusetts Institute of Technol-

Ex-Cemetery Commissioner Marcus H. Cotton has been chosen superintendent of Woodbrook Cemetery, Woburn, Mass. Mr. Cotton has served as commissioner five years, and is thoroughly equipped for the work of caring for the grounds.

Mr. Stephen Child, landscape architect and consulting engineer, of Boston, Mass., will return from his winter office in Santa Barbara, Cal., about the middle of May. Mr. Child has had a busy season in California.

Mr. L. L. Mason, whose obituary notice was given in the last issue, was one of the oldest members of the Association of American Cemetery Superintendents. The Association was organized in 1887 and Mr. Mason became a member in 1888.

Mr. Frederick L. Ford, for fifteen years in the employ of the city of Hartford, Conn., and for the past nine years city engineer, resigned the latter position on March 2, to take effect April 1, to become the leading member of the Hartford engineering firm of Buck & Sheldon, which in future will be known under the corporate name of Ford, Buck & Sheldon, Inc. Mr. Ford professionally has been a very successful man and Hartford is to be congratulated on the high order of services it has been able to secure in its engineering department and the confidence that department has inspired in its citizens. It need only be said that Mr. Ford is a member of the American Society of Civil Engineers, has been president of the Connecticut Society of Civil Engineers, has been prominent in the American Civic Association and the National

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Conference on City Planning, to declare his status. Mr. Ford's name is also well known by his writings on various subjects of importance in city development, some of which have appeared in PARK AND CEMETERY. He was born in North Branford, May 1, 1871, and graduated from the Sheffield Scientific School, Yale University, in 1893. In 1896 he became assistant city engineer of Hartford. Much regret is expressed on his leaving the city's service.

PUBLISHER'S NOTES

The superintendent of a large Chicago cemetery who is using concrete for various purposes, states that power concrete mixers insure a saving in labor of over 60 per cent. In view of the large amount of concrete used at parks and cemeteries, this statement should prompt a thorough investigation of the subject. The only device of this kind that has been advertised in Park and Cemetery is the Systematic Concrete Mixer, made by the Concrete Machinery Co., Jackson, Mich. The mixer was adopted by the Woodmere Cemetery, Detroit, Mich., after a careful investigation of many styles. It is said to have a number of practical advantages over other makes, not the least important of which is its rapid and economical service, accuracy of feed with any material, and durability. This company manufactures a very complete line of concrete machinery especially adapted for sidewalk, street, park and boulevard work, and has the endorsement of several city governments and leading contractors who have adopted their machinery.

Grass edgers or trimmers play an important part in the well-kept park or cemetery. They are used for cutting the grass around trees, shrubbery, monuments, etc., where the ordinary lawn mower cannot be used to advantage. The Pennsylvania Ball Bearing Under-cut Lawn Trimmer, made un-. der the Secrest patents by the Supplee Hardware Co., Philadelphia, manufac-





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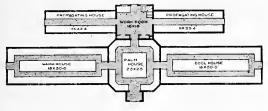


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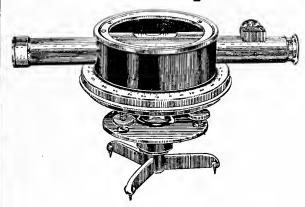
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turers of the Pennsylvania Lawn Mowers, is the latest improvement of this kind on the market. This useful little machine, it is said, will get the last blade of grass in the most difficult places. It is made with a conical cylinder and bent side plates, which enables the operator to cut not only up to a fence or rail, but actually cut the grass several inches under the pickets or under the rough projecting edges of rock face bases. The cylinder has four crucible steel blades and an underknife of the upturned or raised edge type originated by this company. A catalog describing the machine may be had by addressing the Supplee Hardware Co., Box 1599, Philadelphia, Pa.

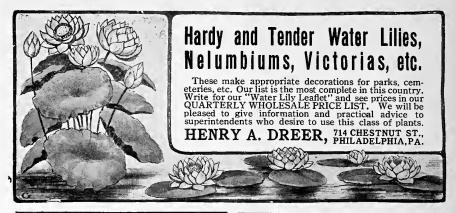
WILMINGTON PARKS

(Concluded from page 537)

was widened and the wooden floor replaced by one of concrete. The grade of the road has been improved, and wherever filling has been necessary it has been resurfaced.

Work on the new Baltimore and Ohio Railroad bridge and approach has been going on during the year, and has kept that part of the park in a torn-up condition. The first plan of the railroad company called for an overhead crossing of Eighteenth Street at the park boundary. After considerable negotiation the plans were changed and an undergrade crossing adopted. This gives easy grades from Franklin Street to the railway, does away with the unsightly embankment, and provides a good connection with Snuff Mill Lane and the roadway to be constructed across the old railroad bridge. It also makes a good start toward the driveway to Alapocas Woods.

In South Brandywine Park the old foot bridge was torn down early in the season and a steel suspension bridge constructed by the railroad company.



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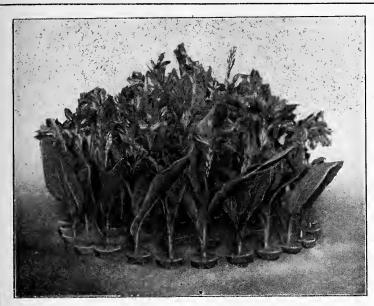
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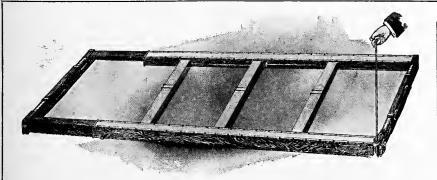
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LAKEWOOD CEMETERY CHAPEL.

(Concluded from page 548)

the personality of all the people that worked on this chapel with me. J would like to make you understand that every square foot of mosaic work that you are looking at has over one thousand separate pieces, and it is no exaggeration that there are nearly ten million or more separate pieces in the chapel at Lakewood. And I do it, why? So as to make you understand the fundamental quality of the color scheme with which the artist is working.

"But my mission is simply to suggest, for the moment; there is no time to elaborate. I only want you to remember that the thought of myself and my co-workers in following the instructions of your building committee had been to make a chapel not hopeless, not gloomy-to eliminate the very present blight, and bring it into color and harmony of rich and beautiful schemes. For religion, if it means anything, is not a hopeless form; religion means a spiritual uplifting, and if we place faith on one side and hope before us, and follow with love, we add a fourth dimension of memory because, enshrined in your hearts and mine, must always be the memory of those we have lost."

CEMETERY REPORTS

Continued from page 553)

bee, of Marshalltown, three acres have been replatted, allowing no paths around burial lots, and 164 more lots is the result. At the meeting the board of directors spread upon the records a tribute of respect to the late Joseph H. Merrill, who died April 25th. He was chosen president of the association in 1881, but failing health compelled his retirement on October 12, 1909. For 28 years he was president, giving his time and services free of compensation, and the record bears witness to the high estimation in which he was held by his associates and to his fine citizenship.





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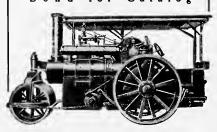
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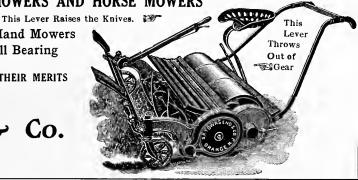
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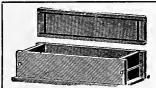
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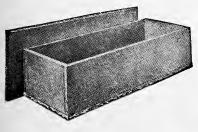


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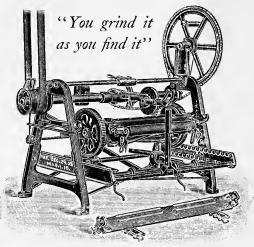
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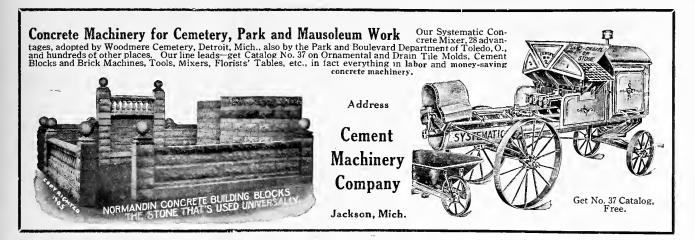
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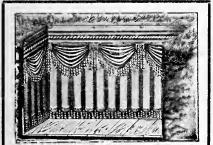
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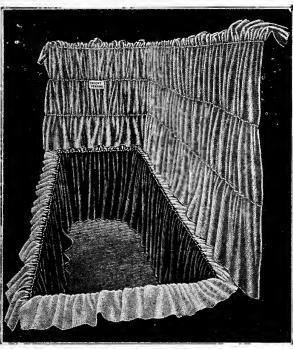
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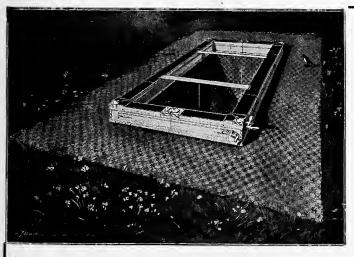
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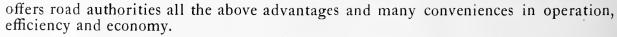
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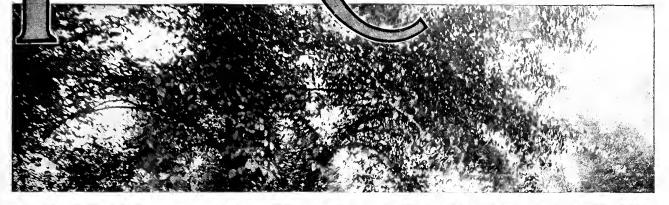
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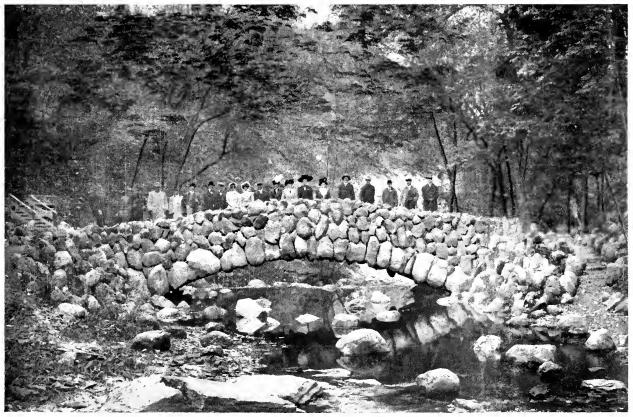
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Vol. XXI., No. 4.

JUNE, 1911





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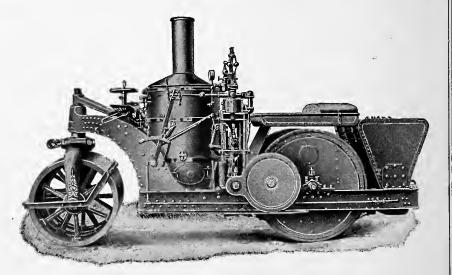
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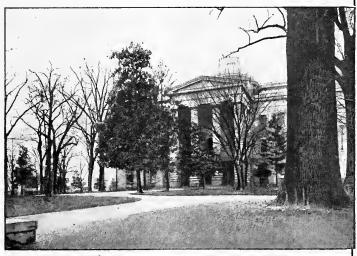
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PARK AND CEMETERY

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Vol. XXI

Chicago, June, 1911

No. 4

Garden Cities

On May 29 the City Club of Chicago gave another opportunity to its membership and friends to listen to the second of the guests of the Philadelphia Conference on City Planning to visit Chicago, at a luncheon at the Great Northern Hotel. The visitor was Mr. Raymond Unwin of London, and he was accompanied by his wife. In 1905-6 Mr. Unwin laid out Letchworth, called the "First Garden City," and more recently has planned the "Hampstead Garden Suburb," which has attracted much atention. He is also the author of "Town Planning in Practice," and in the introduction to his audience by the chairman, Mr. I. K. Pond, President A. I. A., the latter said "Mr. Unwin might, by simply reading the headings of his book, make you a pretty good In beginning on his subject matter Mr. Unwin speech." remarked: "It seems to me that one method of city planning has emphasized what I think is a very important fact for city planners all over the world to remember, namely, that the art of city planning, like all other art, is primarily a form of expression and that it is only healthy and sound when it is a natural, straightforward and honest expression of the needs of the community. Art is not the trimming to be put on like lace and furbelows." In this there is much food for thought as indeed there was throughout his illustrated talk. Such city-planning conferences must result in inestimable good, not the least good being that they broaden the field from which to gather both precept and practice.

Fairmount Park Art Association

When we think over the long and useful life of the Fairmount Park Art Association, and its success in improving the city art of Philadelphia and even in providing many attractive monuments, it is surprising that its methods have not been imitated in many other cities. The 39th Annual Report, recently issued, from this point of view alone makes an interesting pamphlet. For Fairmount Park the association has been the means of securing thirty-eight important works of art, while to the city list of monuments four have been added. The association, not without just cause, claims that the movement for civic betterment, for the "systematic promotion of worthy memorials and for the recognition of beauty in public places as something worth working for," had its origin in Philadelphia when the association was organized thirty-nine years ago. Its methods of work, its organization, and the aims it cultivates, might well be studied and adapted to the circumstances of any city of importance. Such an association even in an ordinary way would do incalculable good in any community, and its work would be permanent and redound to the benefit of both the present and future.

~ ~ ~

State Conventions of Cemetery Associations

The Ohio Association of Cemetery Superintendents and Officials holds its Tenth annual convention on June 21 at Marion, O., and for which, as will have been seen in the May issue, an excellent program has been prepared. The New England Association holds frequent meetings which have proven to be very profitable to its membership. It is regrettable that the associations in other states have not kept pace with these flourishing organizations that are doing

~ ~ ~

so much for the cemeteries in their respective localities. Public spirited Boards of Cemetery Commissioners and other cemetery officials ought to realize the advantages to be gained by promoting the welfare of such associations in their states as well as of co-operating with the National Association which includes in its membership the leading experts of the country in cemetery development and management. While the successful work of the National Association of American Cemetery Superintendents is a well known fact to those interested in cemeteries, were it still more appreciated by a larger yearly increase in its membership, its influence would be still greater, and the work of improving our cemeteries more rapidly advanced. The most successful national associations today are those whose membership is, in its measure, increased through the state associations. Not only is the membership increased but the broader organization enables them to take up and push to a successful issue problems that have a wider significance, and which could not, probably, be taken up otherwise.

*** * ***

City Planning

City planning and the necessary organizations to carry to a successful issue the redevelopment, as it were, of our progressive towns is making good headway. One of the more recent instances of the movement is that of the good old town of Salem, Mass., where by ordinance there has lately been established a City Plans Commission. Section 3 of the ordinance gives the main proposition: "It shall be the duty of said Board, with such expert assistance as they may be empowered to employ, to make a careful study of the entire city, and cause to be made a city plan or plans, which in their judgment will be best adapted to the present conditions and future needs of Salem, and as soon as may be, report in writing to the City Council, the result of their study and investigation, together with 'all necessary plans, maps, diagrams or models which shall be considered a part of their report. * * * Said commission shall give special consideration to the elimination of grade crossings, the physical extension of the city, the changing of the grade and lines of existing streets, the lay-out of new streets, ways and squares; the development of parks and connecting driveways, civic and social centers and public buildings; the preservation of historical landmarks; the locating of statuary or other works of art; the improvement of harbor and water front; the industrial and commercial developments of the city, and the general further improvement and development of Salem, along such lines as may, after investigation, seem for the best interests of the city and its citizens." This covers a good deal of ground which a painstaking and capable commission will take advantage of in formulating its plans for a future Salem.

State Conservation of Resources

There is always a growing need for prompt and united action in conserving natural resources, whether state or national, and every state not having already done so, should follow the example of Illinois and form a state conservation association. Certain objectionable activity in the legislature has hurried this matter, and the object of the association as set forth, is briefly: "To preserve the public interest in the streams of Illinois, the submerged lands of the state and all places of natural scenic beauty. All interested citizens are invited to become associate members. The headquarters address is 1 South Dearborn Street, Chicago."

y y



PROGRESS OF PARK MAKING IN MINNEAPOLIS

Probably no work of park construction now actually in progress in this country is of more importance than that under way in Minneapolis. This city has natural features of lakes, river and forests, that can be matched nowhere else in this country and the generous, efficient manner in which a well-rounded park system is being built, makes each year's work in park building in that city a lesson of much value to anyone engaged in park improvement.

The last annual report, a book as elaborate, handsome and complete as those previously used, tells that the year just past has been one of more than usual activity. A considerable amount of additional land has been designated for park purposes; existing parks and parkways have been maintained in the usual thorough manner, and good progress has been made in the matter of permanent improvements.

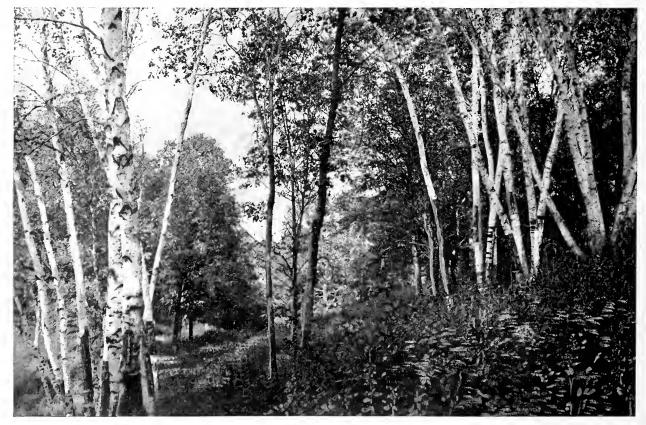
The most important improvements that have been completed during the past year may be summarized as follows:

The dredging of Lake of the Isles to a depth of eight feet below normal water level; the macadamizing of that section of River Road East lying between the Franklin Avenue bridge and the City Limits; the construction of a section of Glenwood Parkway extending from Superior Avenue to Sixth Avenue North; the building of three field houses in different parts of the city and a house for the use of the Superintendent at Lyndale Farmstead; the construction of a permanent bridge over Minnehaha Creek, below the falls; the grading of the easterly portion of Lyndale Park, and the enlarging and deepening of the pond in Camden Park

The dredging of Lake of the Isles has occupied four seasons and has cost \$52,489.33. Because of the nature of the material to be handled difficulties were encountered that seemed at times almost insurmountable, but they were all finally overcome. While the deepening process has been completed there is still a large amount of work to be done in the way of grading, seeding and planting the banks. The grading and planting are now under way.

When the banks are all properly graded, seeded and planted and the bordering driveways and bridges completed, this season, Lake of the Isles will be a rare beauty spot; and when the lake connections now under way are completed, which is expected be by July 1, 1911, the Chain of Lakes will constitute one of the finest park features that can be found in the country.

Work on the connection between Lake of the Isles and Lake Calhoun



BIRCH WOODS IN GLENWOOD PARK, MINNEAPOLIS.

has progressed rapidly during the past year. The excavation is now completed excepting the lagoon just north of bridge number one. Bridge number one is nearly completed. Bridge number two is being built by the Chicago, Milwaukee & St. Paul

Engineering and soundings	4,845.55
Miscellaneous labor and sundry	
expense	2,205.33
Oiling roads	1,914.04

nent asset of considerable value. The total cost of this improvement was \$13,-224.17

Of the three field houses, one was built at North Commons at a cost of \$16,476.96; one at Jackson Square at a cost of \$12,582.83, and one at



SHORE WALK AT LAKE OF THE ISLES PARK, MINNEAPOLIS.

Railroad Company under an agreement that leaves the question as to which party shall finally pay the cost to be determined by the courts; the work is being pushed rapidly and will probably be completed within the next three months. Bridge number three, near the south shore of Lake of the Isles, is well under way and will probably be finished before July 1st of the present year. Bridge number four, near the west shore of Lake of the Isles, is also under construction, and it is expected that it will be completed early in the present summer. The designs for these bridges have previously been illustrated in PARK AND CEMETERY.

Former water area100	acres
Present water area120	acres
Increase in water area 20	acres
Former dry land area 33	
Present dry land area 80	acres
Former swamp area 67	acres
No more swamp.	

It is estimated that the work of grading, seeding, planting. etc., of the remaining incompleted part of the park will cost about \$25,000.00 more, making the total expenditure for this park of 200 acres \$131,000,00, or \$655.00 per acre.

The section of River Road East that was completed early last season is constructed of macadam with a "tarvia" wearing surface, and President Decker, of the Park Board, says it is probably the best piece of roadway in the entire system of parkways. The length of the section is about one mile and the width of the roadway—thirty feet; the cost was \$15,931.47.

The new administration plant and residence for the use of the superintendent at Lyndale Farmstead is a much needed addition to the equipment that will not only make for better service, but which will constitute a perma-

Van Cleve Park at a cost of \$6,022.02. Each of these buildings was planned to meet the needs of the locality where it is situated, and they are all of substantial construction and fitted with modern hot water heating plants and good plumbing systems. They are designed for both summer and winter use, and, besides their ordinary use as park shelters and warming houses, they are intended to supply in some measure the demand for social center buildings.

The section of Glenwood Parkway from Superior avenue to Sixth avenue north was constructed of good road material found near at hand. For a distance of 3,500 feet the roadway is 36 feet in width and for the remaining 2,600 feet, the width is 30 feet. The total cost was \$15,020.05. It is of interest to know that the actual cost of the thirty-foot gravel roadway above described, including sub-grading and engineering, was at the rate of \$11,924.88 per mile, and the cost of the thirty-six foot portion was

at the rate of \$12,131.32 per mile. The total cost of the thirty-foot macadam roadway with "tarvia" surfacing, on the east bank of the river, was at the rate of \$16,260.29 per mile.

Glenwood Parkway is a remarkably picturesque, attractive driveway, winding in easy curves, first through the "Home Wood" residence district as a background. Going in either direction the constant change of scenery is very pleasing and fascinating, and the parkway is already a favorite with the driving public.

The Park Board is now maintaining refreshment stands at all parks

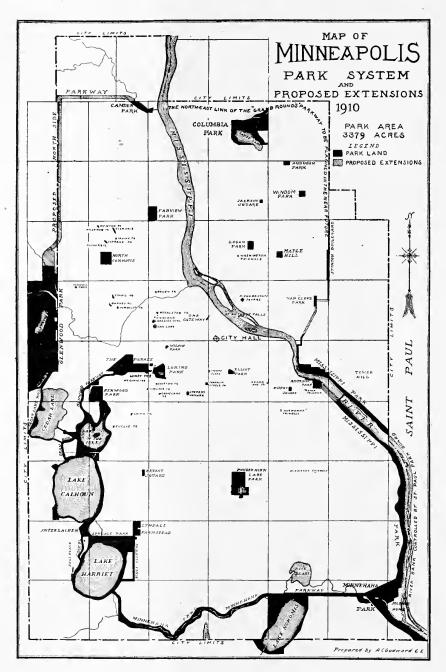
other parks. The Supervisor of Playgrounds, C. T. Booth, has had the assistance during the season of ten instructors and excellent results have been obtained. The Board considers it thoroughly established in relation to playgrounds that efficient supervision is absolutely necessary in order to insure proper benefits.

With so many lakes in the park system it is not strange that boating should be a favorite form of recreation during the summer months. The Board has 199 row boats, about a dozen canoes, three sail boats and a launch for hire on Lake Harriet, and a smaller number of boats on other lakes. These boats, at low rental rates, brought in a revenue of \$14,-432.58 last season. In addition to the boats owned by the Board there are many private row boats on the lakes. the owners of which pay an annual license fee of \$3.00 each. Canoeing is a comparatively new sport in Minneapolis, but has gained very rapidly in popularity. Besides the canoes that are kept by the Board for rental purposes, there were 274 private canoes on Lake Harriet last summer and a considerable number on Lake Calhoun and Lake of the Isles. The license fee for private canoes is \$4.00 per annum. A "Canoe Carnival" was one of the events of last season as well as of the season before.

Eighty-one free concerts conducted by Wm. Warvell Nelson were given during the season at Lake Harriet and neighborhood parks by a band of thirty-six regular musicians and occasional soloists. Concerts were held in the neighborhood parks on Saturday and Monday evenings and on Sunday afternoons; on all other evenings of the week the concerts were held at the Lake Harriet pavilion.

During the skating season seventeen ice rinks, either natural or artificial, are in almost constant use. Tobogganing and sledding are also in vogue wherever suitable slopes are available.

Since the year 1887 this Board has had the power to regulate the planting of trees on city streets, and in the year 1889 authority was given to plant trees and to assess the cost against abutting property. This power has been exercised mainly in response to petitions of property owners, and since 1889 more than fifteen thousand trees have been planted and cared for by this Board. Until very recently the assessment necessary to cover the cost of planting and three years' care has been at the rate of \$5.00 per tree, but it has been



a narrow pass, then along the shores of a pretty land-locked sheet of water, Birch Pond, at the foot of a steep, beautiful, birch-covered hillside, and then climbing on an casy grade over a ridge covered with fine oak, maple, and elm trees. From the top of this ridge looking north, the eye beholds Glenwood Lake at the foot of the gentle hill, with the wooded hills of the northern part of Glenwood Park and

that are resorted to by large numbers of people and at the principal skating rinks during the winter season. Only light refreshments are served, but the demands are large and constantly increasing.

During the past season well equipped playgrounds have been maintained in seven widely separated parks and less fully equipped playgrounds have been maintained in four found that this is not sufficient to cover the cost at the present time, which ranges from \$7.00 to \$7.50 per tree.

The total cash receipts of the Board for the year 1910 including balance brought forward, were \$694,651.59, and the total disbursements were \$649,970.23, leaving a balance of \$44,681.36 in all funds.

Two notable works of art, to be reproduced in bronze, have been presented to the city within the past year, and the bronze casts will be given appropriate places in the parks.

One is a statue of the late Colonel John H. Stevens, pioneer resident and honored citizen, and will be placed in Stevens Place. The other, a statue of Hiawatha from a cast by the late Jacob Fjelde, was presented by the school children of Minnesota, and it will be given a place near the Falls of Minnehaha.

The foot bridges and the toilet buildings in the glen below Minnehaha Falls have been repaired and two new bridges have been built. The second bridge below the falls has been entirely rebuilt, while the rustic wooden bridge at the foot of the falls has been replaced by a reinforced concrete structure faced with boulders. The boulders were secured from the park and vicinity; and the rugged, rustic effect of the bridge itself, together with the rockeries supporting the banks of the approaches to it fit well into the other picturesque features of the gorge and glen. Appropriate plantings of evergreens and native shrubs, vines and alpine plants, which will have to be replenished from time to time, have been established. A little dam has been built below the bridge forming a small pool, giving an additional motive and character to the structure and its surroundings. The low water in the creek was very favorable for this work and also offered an opportunity for the close inspection of the rock foundation under and above the falls.

Concerning the Falls, Superintendent Wirth makes this interesting report:

"The fear has often been expressed that on account of the gradual disintegration and shelling off of the underlying strata of soft limestone, a part of the over-hanging ledge on the crest of the falls would break off and that such a break would disfigure them, and that eventually they would become a thing of the past. I have consulted with Doctor F. W. Sardeson of the University of Minnesota and I believe, with him, that there is little danger of such an occurrence. That the falls will gradually recede is, of course, conceded, but this process will follow the same natural lines of past ages, always leaving a natural irregular crest over which the water will tumble to the depths below. Soundings made in the creek bed above the

falls as far as Minnehaha avenue indicate that the ledge of hard limestone is continuous, and there is, therefore, no danger of its giving out for centuries to come. To build a protecting concrete or any other wall below the falls to prevent the disintegration of the soft limestone supporting the upper stratas would destroy the natural appearance of the falls itself. Furthermore, the ledge over which the water flows will gradually recede and the proposed wall would

vantage over the heavier oil used last year that it penetrates better and deeper, permits a more even and thinner application, and can be more economically handled, as it does not require heating in ordinary summer temperature. A new oil distributor was made at the park shops which

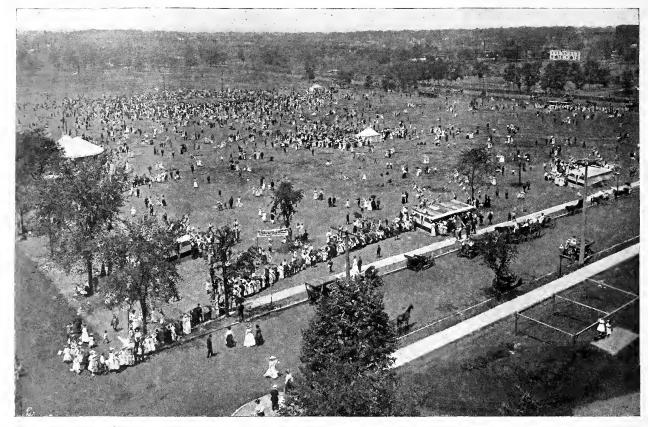


SHORE PATH, LAKE CALHOUN, MINNEAPOLIS PARK SYSTEM.

more and more assume the appearance of a dam. I am of the opinion that the supposed danger to the falls is so remote that it is needless to feel apprehensive concerning it."

The oil used for this year's operation in boulevard oiling was the lighter oil, No. 4, furnished by the Standard Oil Company at the rate of 3.6 cents per gallon in car tank lots. This oil has proven quite satisfactory in its lasting qualities and it has the ad-

makes it possible to control properly the flow of oil, both as to quantity and width of application. It consists of a 6-inch pipe with three rows of ½ inch holes. Brass sleeves fitting closely over the pipe and divided into four 2-foot sections, can be shifted by levers closing or opening the holes at the will of the operator. This distributor is easily removed and can be attached to any one of the sprinklers



SANE FOURTH CELEBRATION ON "THE PARADE," MINNEAPOLIS PARK SYSTEM.

at a moment's notice. The total mileage of boulevards oiled is 20.2, and the cost of same is \$6,313.40, or \$312.50 per mile. The average cost per square yard is \$0.0238 against \$0.0331 in 1909.

At Lake Calhoun a path has been established along the steep and wooded bank between the boat dock on Lake street and Thirty-fourth street, and stationary benches have been placed along it. Both features have been used and enjoyed by a large number of people. Two additional boat docks for private boats and canoes have been built for service on Lake Calhoun.

The officers of the Board are as

follows: Wilbur F. Decker, president; Edmund J. Phelps, vice-president; J. A. Ridgway, secretary; C. A. Bloomquist (ex-officio), treasurer; Chelsea J. Rockwood, attorney; Theodore Wirth, superintendent; C. A. Bossen, assistant superintendent; C. T. Booth, supervisor of playgrounds; Max Kaiser, forester.

EXPERIMENTS IN OILING PARK ROADS

Address before American Association of Park Superintendents, by Frank Brubeck

Our extent of roadway which we oiled is somewhat limited, about a mile long, and the oil was put on this spring in May. The road surface was of all kinds. We had the hard roadway. We had the dust, which we did not remove in some places, but was filled up with fresh gravel, and this was left on account of the lateness of the season and opening of the park for public use. It was not dressed down, as it should have been. We used the Standard road oil. I don't know what number, the 60 per cent asphalt oil and a black heavy oil, practically odorless. This was put on hot and put on with sprinkling cans in a rather primitive way, but the result has proved interesting to

us. As has been said, this was put on within two or three feet of the margin of the roadway and has wholly eliminated the dust problem for us. The roadway was closed for a few days after being spread and was then opened at once to the public and was not sticky, was not carried into the buildings or neighborhood at all. It has been packed down by the automobile and other traffic that passes through the parkway until some portions of the road, where it was hard to start with, are as smooth and more polished than an asphalt street. Where the fresh gravel was put on, which was experimental with us, I had some fears that it would not work. Of course our traffic there, the automobiles, would not be as great as in larger cities. I judge, however, it will apply to smaller parkways where the automobile traffic is not too great. We found this fresh gravel, which had 10 per cent of sand with it and 5 per cent of loam, soon began packing and has spread very little. There is a small strip of this roadway, oiled last winter with some kind of oil, and we put no oil on this, and we can scarcely tell the difference, which indicates that one oiling with the heavy oil will be sufficient for the year, and perhaps a light sprinkling next year will carry it through three years. The manager for the state of the Standard Oil Company told me a few days ago that

they had sold nearly 68,000 barrels in the first six months in the smaller towns for road use. In the smaller country towns we have few macadam roads. The oil is eliminating the dust. There is one other little bit of roadway we experimented with. We trimmed the surface down to a hard sub-grade, rolled and packed thoroughly and spread from four to six inches of crushed rock macadam, little finer than ordinary macadam, stone one inch in diameter. This was rolled and packed and then coated with a 90 per cent Standard road oil, petrol or asphaltum, the residue of the oil, and then that was covered with a dressing of washed river sand. and on some of it we used a little of the crushed stone dressing. This was thoroughly rolled and traffic kept off

a short time. We made a mistake in not getting on enough coating of the asphaltum. In the edges of the road it has broken with the automobile traffic, but I believe if spread heavy enough that will furnish a hard roadway for the ordinary automobile traffice, but with that I don't believe it will answer in Mr. Zartmann's city or Chicago, where there is a constant traffic. On the ordinary traffic roadway, however, where the traffic is not too heavy and only mixed, it has proved very satisfactory with us. It has eliminated the dust, and the street and park superintendents and private property owners have taken the matter up and oil their unpaved roadways. Last year the crude oil was used on the roadway. That was unsatisfactory. It had a very bad

odor, did not last and did not give satisfaction. I found this, too, in the use of this heavy asphaltum oil that after heavy rains-this last July we have had a great deal in our vicinity, over seven inches in July-that the water would not stand on the roadway. While it is drained very well except in a few places, yet these very heavy rains have not affected the roadway at all. After the heaviest rain this oil turned it off, and where the fresh gravel is put on it is comparatively dry underneath, except for the oil. The oil has the quality of draining the water from the street and keeping it dry in a certain way. I don't know whether this experience in our small way will be of benefit to you or not, but it has been our experience.

FORMAL AND INFORMAL SCULPTURED FOUNTAINS



CHILDREN'S FOUNTAIN Mary Washburn, Sc.

The two fine sculptured fountains, illustrated here, are good examples of two very different types of these park adornments. The children's fountain, of which the model was shown at a recent exhibit at the Chicago Art Institute, is a picturesque, informal work suited to a naturalesque landscape where it could be built into a rugged wall, cliff, or hillside. The Kastalia fountain, a beautifully scuptured monumental work, is well-placed in a formal situation in the court-yard of a handsome public structure.

Miss Mary Washburn's full sized model for a children's fountain is one of the most ingenious fountain designs that have been shown at any of the Chicago exhibitions. Three childish figures and a dog sit beneath an overhanging crag of stratified rock, the water falling in front of them and into a roughly outlined basin. The idea is very happily conceived. The boy in front dips his feet in the basin and the dog follows the trickling stream with a quizzical glance. The little one in the rear is also interested and starts for the edge but is restrained by the protecting hand of the little sister seated at the right. One copy of this fountain has already been erected

with proper setting on home grounds in Rensselaer, Ind.

The Kastalia Fountain in the University at Vienna, Austria, was modeled by Prof. Edmund Heller, at that time rector of the Imperial and Royal Academy of Arts in Vienna. It was recently unveiled with ceremony in the Arcada Court of the Vienna University. The figure is 11½ feet high, and is executed in Laas marble. The pedestal and fountain proper are of Siebenburg marble. The entire height of the fountain is 18 feet. It is a striking and monumental figure of the severe Viennese school of sculpture and makes an impressive decoration for the great open court of the university where it stands. Kastalia, the Nymph of the Sources, sits enshrouded in a delicate veil, her eyes closed in monumental mystery. Around the base is coiled a bronze serpent.



FOUNTAIN OF KASTALIA, UNIVERSITY OF VIENNA. Edmund Heller, Sc.

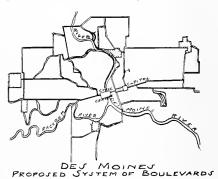
PARK AND IMPROVEMENT WORK IN DES MOINES



PROPOSED GROUPING OF STATE BUILDINGS ABOUT THE CAPITOL AT DES MOINES.

Des Moines, the capital city of Iowa, already widely known for its very successful form of commission government, is making rapid strides forward in many other lines of civic betterment. There are about thirty live improvement leagues scattered over the city, each with well defined policies, the strongest organization being the Commercial Club. This latter, through its various centralized committees, has for several years carried forward a campaign of systematized advertising of the city and the state. In important matters affecting the city's welfare, members of the city council consult with the Commercial Club, which practice tends to relieve friction and greatly facilitate the completion of improvements.

When the Des Moines plan of commission government went into effect, the city practically owned about 700 acres of park land, two unimproved boulevards each about one mile long, two large cemeteries, and about three miles of river frontage. A feature out of the ordinary was that all



this park land had either been purchased outright or was being bought under short term payments, so that this present year will see the last payment for park property now owned by the city.

Under the commission government the city's affairs are handled by a mayor and four commissioners, each devoting his entire time to the city. The mayor exercises general supervision and heads the department of public affairs; and the other four commissioners head the departments of public safety, finance, parks and public property, and streets and public improvements. Under Superintendent John MacVicar of the department of streets and public improvements, is being carried on some very interesting improvement work.

A couple of years ago the women's clubs were instrumental, after securing the co-operation of the commercial clubs and the various district improvement leagues, in having Charles Mulford Robinson, of Rochester, brought to Des Moines to study the

cial thought for suggestions applicable to Des Moines.

During the summer and autumn of 1910, the parkway previously surveyed was graded sufficiently to allow a limited amount of pleasure traffic. The adjoining property owners are so far satisfied with the probable success of the new work that they will not only agree to give the city free title to the strip of right of way, but have also paid for the grading that was done last year. The new recreation highway was named Witmer Boulevard, after an aged patron of the work, since deceased, the thought in the district improvement league being to honor the old gentleman while he yet lived to enjoy the courtesy.

The present year several leagues in other parts of the city are preparing to put in shape other sections of the boulevard scheme. Indications look very favorably toward the eventual completion of a comprehensive system of boulevards to add comfort to the city life and conserve the rare



MODEL FOR GROUPING DES MOINES MUNICIPAL BUILDINGS ON RIVER FRONT. THIS WORK IS THREE-FOURTHSCOMPLETED.

city and make report on its possibilities for betterment. In order that Mr. Robinson's suggestions might be put in process of fulfillment, the Commercial Club agreed to defray the expense of securing a landscape engineer to supervise the survey for a valley boulevard or parkway, with the idea that enough interest would be created to push the work on toward the completion of a comprehensive system of parks and boulevards. Ray F. Weirick, of Kansas City, was selected to take charge of the surveys, and on the completion of the maps and estimates the city council was so well pleased with the possibilities of the parkway that he was selected to remain with the city as its landscape architect during the life of the present council, a part of the agreement being that he should spend the winter of 1910-11 in Europe studying the cities there with spenatural scenery of the region in which the city lies. For its population, Des Moines spreads over more ground than any other city in the United States, so that up to this time no tenements are found and some of the most attractive features of the city's site yet remain in a state of nature. Many citizens have expressed a willingness to give small tracts of park property to the city, so that this spirit of generosity, combined with the enterprising policy of the people as a whole, will eventually result in the completion of a large and effective park system at minimum cost.

The topography of Des Moines affords a very fine variety of attractive scenery. The city lies on both sides of the Des Moines river, the largest stream within the borders of the state. The plans call for shady riverside drives and a magnificent grouping of municipal buildings on the

river front near the business section, four out of the six buildings being already in place. This civic group, connected by four monumental concrete bridges, will be in full view of incoming and outgoing railway passengers.

An instructive feature of the Des Moines boulevard scheme is the intended treatment with reference to the state capitol building. This is a fine piece of architecture with a towering dome and situated on a commanding hilltop east of the river and the civic group. Although but one street seems at present to center on this dominating structure, it will be possible, without changing the course of any existing avenue, to work out more than a dozen street vistas to the capitol dome, adding greatly to the dignity of the city. The capitol grounds are none too large, but a wide agitation is in progress to have the state enlarge its grounds and prepare for a grouping of state buildings in the rear of the capitol.

Another interesting innovation is in the matter of improvements to school grounds. There are 63 school buildings in the city, most of them



RECENT WORK ON NEW BOULEVARD AT DES MOINES.

new and situated on large grounds. Through gifts and otherwise, funds are available for landscape treatment of several of these school grounds the present year, the work to be under the direction of Mr. Weirick as the board's landscape architect.

Des Moines is a very substantial and growing city, but not one which moves by leaps and bounds. Now that plans are quite well agreed upon, the improvements in the way of boulevarding, park development, etc., will go steadily on from year to year, under the direction of the council. The Des Moines of today shows a remarkable improvement over the city of five years ago, and all indications point to even greater advances in the coming years.

THE SELECTION OF PARK LANDS

From a report prepared for the Park Board of Chattanooga by John Nolen, Landscape Architect, Cambridge, Mass.

The establishment of a system of parks and pleasure grounds for a rapidly growing city is one of the most difficult and responsible duties that ever falls to a city government, involving as it does the expenditure of large sums of money and the construction of many permanent public works. The principles which should control the selection of park lands may be briefly summarized as follows: (1) Accessibility for all classes of citizens by walking, driving, riding, or by means of cars. (2) Adaptability, or the selection of land possessing in the greatest degree the natural physical characteristics necessary for the particular park purposes to be served, and thus requiring the least expenditure for subsequent development. In this connection the boundaries of the property should have special consideration. (3) Economy, or the selection, so far as practicable, of inexpensive lands and lands which would least disturb the natural growth of the city. (4) Early action, or the selection of property for parks in advance of the settlement of a neighborhood.

While there is a widespread appreciation in American cities of the necessity

for a large increase in the number of parks and playgrounds, few even of the more enlightened communities seem yet to understand that these open spaces are of great variety, that they are or ought to be selected and designed to serve radically different purposes, and that the failure to understand this principle and to keep it constantly in mind leads to gross waste and inefficiency in our public grounds. In few other phases of public or private life is there so general a lack of clear thinking. This is an important matter, because failure to select sites discriminatingly, to design them for specific purposes, and to confine their use to those purposes is to lose to a considerable degree the benefits that might otherwise accrue to the people. Of course, it is true in this, as in most other matters, that there is some overlapping. The purposes are not absolutely distinct, and most public grounds are serviceable in a number of different ways. It is equally true, however, that the greatest efficiency here, as elsewhere, depends upon careful planning, upon a clear and intelligent differentiation, upon a recognition that the ends to be served are different, and that, therefore, different means must usually be employed to meet them.

A park system for such a city as Chattanooga should be planned comprehensively, and the recreational purposes of each property selected should be clearly understood. The units of a park system are: (1) City squares or small open spaces; (2) playgrounds; (3) small or neighborhood parks; (4) large outlying parks or scenic reservations; (5) a chain of connecting drives or parkways. Few American cities have yet what can properly be called a comprehensive, wellbalanced, and well-developed system of parks and pleasure grounds, but it should certainly be the aim of park commissioners in securing park lands to select them with regard to the ultimate establishment of such a system. The recommendations for Chattanooga embodied in this report provide fairly adequately for every feature except city squares and the large outlying scenic reservations. The former it is probably now too late to obtain; the latter are unusually well provided in Chickamauga Park and the other parks in or near Chattanooga belonging to the National Government.

METHODS OF BITUMINOUS ROAD CONSTRUCTION

Address Before American Road Builders' Association by Harold Parker, Chairman State Highway Commission of Massachusetts.

I am happy to inform you that the governor of Massachusetts has officially appointed me a delegate to this convention. This will indicate to you that the state of Massachusetts not only is ready and anxious to learn from others, but to convey, to any who may desire, such information and knowledge as it has acquired by experience in the construction and maintenance of public highways.

It also gives me great pleasure to bear testimony of the progress that has been made in this highly important work during the years that have elaspsed since the first convention of this organization.

I have a distinct recollection of the speeches to which I listened at early meetings of this association, and it is interesting to compare what was said at those meetings with what is being said here today. During these years not only has the interest in scientific roadbuilding been vastly increased, but a new consideration of the matter has been forced upon us by the advent of the automobile.

Not many years have elapsed since the real interest in this subject was generally apparent in America. We, in Massachusetts, perhaps felt the pressure before it was felt in the middle west, or in any other part of the United States, and we got to work, by the organization of the highway commission, among the first of all the states, and have been building, maintaining and experimenting with highways under all possible conditions eyer since.

Our representatives have investigated methods employed not only on this continent, but in the main countries of Europe, so that it may be assumed that we have a very good conception of the comparative conditions everywhere; and it is possible for us, therefore, to advise you on two points: First, as to the general progress made in this most important work; and second, as to the methods best adapted to the preservation of roads against the destructive elements of automobile travel.

I believe that it is becoming generally recognized that the amateur or the politician, as such, is not properly an advisor or administrator either as to the construction or method of maintenance of public roads. It is eminently a matter where only the most skillful and experienced have any right to direct. Probably more money has been wasted by incompetent and inexperienced men in a futile effort to improve roads than in

any other one work where public money is expended.

If this view is still further extended to the point where the entire public insists upon having only proper men engaged in this work, a most important step will have been taken. Such men will, of their own initiative, watch the experiments and progress of other road builders, as well as learn from their own experiments, and evolve methods which will in the most satisfactory way solve the problems arising from the conditions under which they themselves labor.

The second point to which I wish to call your attention is the methods that have been adopted generally for protection against motor traffic; that is, traffic which is swift-moving, constant, and in which the motive power is transmitted through the wheels, and not contained in the animal drawn vehicle. The effect produced by this traffic is, of course, manifest to everyone who has had any exerience with roads. The wide pneumatic tire of the automobile, passing swiftly over the road, and propelled by the friction of the wheel upon the road surface, inevitably draws out the finer binding constituents of the road, sweeps them away by the swift passage of the vehicle, and finally loosens the larger parts, so that a road not carefully tended and not provided with any other binder than stone dust and water will, in a very short time (proportional to the number and speed of automobiles, of course), be entirely disintegrated and destroyed.

To overcome this disintegration, road builders all over the world have used every effort of science, skill and experiment. Tar distilled to varied degrees of refinement, residuum and asphaltic oils, and asphalt have been used in every way that ingenuity could suggest.

The method of applying these different bituminous products, is, perhaps, as important a feature as the material itself. It has been found necessary to determine by experiment what, if any, penetration there was of any of these materials into the surface of the road to be treated. It has also been necessary to determine by experiment the depth to which these ingredients should extend in order to reserve the road surface.

Several years ago I heard of the Aitkin spraying machine, which was used in England for spraying refined tar under considerable air pressure. It had previously seemed to me that, to

make a surface application sufficient, the way to apply it was by forcing the material onto the road, in different layers. under high pressure. I therefore looked up and examined with great interest this machine when I went to England two years ago. I found that it was serving the purpose of protecting suburban and country roads with Tarvia in a highly satisfactory way, and that many hundreds of miles of road about London and in the so-called provinces had been treated in this manner. Two of these machines were imported and put into use on our roads in Massachusetts, and have well borne out my views in regard to them.

We find, after trying the different methods known as mixing, grouting, penetration, and different kinds of surface treatment, that where a road has once been well built with macadam or a good quality of gravel and asphaltic oil of suitable quality and consistency, applied under a pressure of from seventy to one hundred pounds to the square inch, in layers of a quarter of a gallon to the square yard, and this immediately covered with stone chips, clean sand or gravel, and rolled with a ten-ton roller, a result is produced which, for any but exceedingly heavily used roads, will preserve and maintain the surface for two years or more, according to the number of applications that are made. The specifications for asphaltic oil used by the Massachusetts Highway Commission for the present year are as follows:

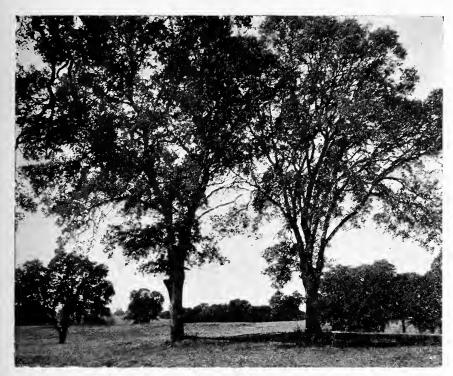
ASPHALTIC OIL.

The oil submitted shall be of uniform color, appearance, general character and viscosity and must fulfill the following requirements:

- (a) It shall not froth when heated to 100° $\mathrm{C}.\ \ \,$
- (b) It shall have a specific gravity of at least 0.97.
- (c) It shall not contain more than 0.5 per cent of dirt or adventitious mineral matter.
 (d) It shall contain not more than 1 per cent of matter insoluble in carbon bisulphide.
- (e) It shall be of such viscosity that 60 c.c. measured at room temperature (78° F. or 26° C.) shall when at 100° C. be not less than 250 seconds nor more than 500 seconds in passing the Lawrence viscosimeter or 200 c.c. measured and tested at the same temperatures shall be not less than 900 seconds nor more than 1,800 seconds in passing the Engler viscosimeter.
- (f) When 20 grams are heated in a flat bottom dish 3 inches in diameter for twenty-one hours in a well ventilated oven, kept at a temperature of 250° C., the loss in weight shall not be greater than 15 per cent.
- (g) When subjected to a number of heatings at 250° c. in a well ventilated oven with intermediate separations of asphaltene and of matter insoluble in carbon bisulphide until the final petroleum ether extract is not more than 10 per cent by weight of the

(Continued on page XII)

FAMOUS RANCH TO MAKE SUBURBAN PARK



OAKS IN DEL PASO PARK, SACRAMENTO, CAL. Seven kinds of oaks, water ash, willows, California walnut, maples, etc., in the park

With the subdividing of the famous Rancho Del Paso, owned by the Haggin and Tevis estate, Sacramento, Cal., into small farms, one of the largest and most romantic of ranches of California will pass into history. The Rancho Del Paso (Ranch of the Pass) was the gateway through which, in the early days, the travel from the East to all points in Central California passed. Located at the very gate of Sacramento, fronting for seven miles along the American river, and containing 44,000 acres of land in one undivided estate, and held for many years intact, this great ranch, like many other California grants, was used to pasture immense herds of cattle or the growing of grain, and here were raised some of the finest race horses that ever appeared on the American turf. When in December, 1844, Manuel Micheltorena, under sanction of the Mexican government, granted to Eliab Grimes what is now known as the Rancho Del Paso, he little dreamed that the day would come when the surrounding country would be settled by the ever-encroaching Americanos and that a city of splendid proportions would arise within a few miles of the grant; nor could he foresee that the grant itself would some day become the home land of thousands

of farmers and orchardists. In view of the stately capitol building the Rancho Del Paso has every advantage that proximity to a large and growing city assures. The purchase of 840 acres by the city of Sacramento, in the heart of the ranch, for the purpose of creating a splendid public park, will give the residents of this section such advantages as are seldom enjoyed in suburbs.

H. A. Alspach, the landscape architect, has been appointed by the mayor of Sacramento to make the plans and oversee the construction of this park. Mr. Alspach with a force of men is now at work on the making of some four miles of road, planting several thousand trees, boring wells and the cleaning of Arcade creek.

Around this public park, to be known as Del Paso Park, a real estate company has plotted what is intended as a fine suburban residence district of some 1,700 acres. The company has had the enlightenment to lay out their tract also on the park plan, with acre lots immediately adjacent to the park, and larger tracts farther back. They have cut thirteen miles of winding roads, and the residence sites have been plotted to take full advantage of the rolling ground, the beautiful knolls and the splendid oak trees, some of which are shown in our illustrations. The views from the choice lots, fronting the boulevard, the creek and the park, make these sites exceptionally valuable as locations for country homes.



VIEW IN DEL PASO PARK, SACRAMENTO, CAL. The broad, low, live oak is over 100 feet across; a 20-acre picnic ground is covered with these and California white, black, turkey and blue oaks.

PARK NEWS.

President L. A. Ault, of the Cincinnati Park Commission, donated to that city a tract of land in the East End comprising about 134 acres, a long-contemplated gift on the part of that gentleman, yet a surprise to the board. The land is perhaps the most beautiful of any in the vicinity of the city for the purpose intended. It lies on both sides of the "hog back" drive of Observatory road, and is so high that it commands a view of both the Ohio and Miami rivers. It is north of Linwood, and on the tract was formerly the Linwood water tower. It runs almost as far east as Red Bank road. Mrs. Ault was first attracted to the beauty of the proposed park site.

The Second Reformed Church of Totowa, located at Temple and Water streets, Paterson, N. J., has offered to that city the Reformed church cemetery at Totowa avenue and Liberty street, for park purposes. The ground will not cost the city anything, but the expense of reinterring the remains and providing for a suitable burying plot must be borne by the city.

A survey of lands in Logan canyon, Utah, has been authorized. The lands are wanted by the city of Logan as a site for a park and waterworks reservoir.

Two additional parks for New York's greater city's park system have been donated by private benefactors. A new seaside park at Rockaway Beach, Queens borough; the property ceded is valued at \$344,000. Mrs. Julia Isham Taylor, daughter of the late William B. Isham, presented to the city the Isham homestead, between Isham and 214th streets, west of Broadway, for use as a public park, to be known as Isham park. The property consists of six acres. It covers the crest of the hill between the two streets. Mrs. Taylor intends the gift as a memorial for her father. It commands beautiful views of the Hudson and the valley of the Harlem.

Last month Dr. George N. Bauer, who has recently been in Europe studying the park problem, presented the committee's report to the Minneapolis Joint Improvement Association, of Minneapolis, Minn. His report recommended the setting aside of two parks, one in North and the other in South Minneapolis, for the trial of such projects as he suggested. For the two experimental parks he suggested play apparamental parks he

ratus for the children, band concerts by night, and two stereopticon shows each week for the grown folks, all to be given entirely free of cost. This plan, he said, would keep young men and women from the saloons and evil resorts and would prove so successful that it would be extended next year if adopted this summer.

The city of Salem, Mass., has passed an ordinance establishing a Board of City Plans Commission for that city. The members are: Mayor Rufus D. Adams, President William H. Colbert of the Board of Aldermen, President Frederick W. Broadhead of the Common Council, Harlan P. Kelsev, five years; Francis A. Seamans, four years; Alfred Audet, three years; Lewis F. Cass, two years; Prof. J. Asbury Pitman, one year. Mr. Harlan P. Kelsey has also been active in arranging a "Children's Crusade" in Salem in reply to the offer of the fly-fighting committee of the American Civic Association, which has offered to give cash prizes to the school children of Salem for the best essays on "The house-fly as a carrier of disease." This campaign has been taken up vigorously throughout the country.

The proposed park and boulevard system for Bloomington and Normal, Ill., to cost \$750,000 was defeated May 15 by a plurality of 2,470.

The Board of Finance of Jersey City, N. J., has completed arrangements for the enlargement of Bayside Park, in the Greenville section. A tract 385 by 100 feet will be deeded to the city as a gift, with the understanding that the city, for \$10,000, will buy a tract alongside of about the same size. The enlargement of Bayside Park will greatly improve that section of Greenville.

The Board of Park Commissioners of Indianapolis, Ind., have added to a purchase recently made seven and a half acres of ground fronting on White river, between Tenth and Michigan streets.

The "plowing up and holding fallow" of Forest Park, St. Louis, Mo., to save the forest trees, which are dying because of the cutting out of the undergrowth is recommended by Mr. George E. Kessler, landscape architect, in his report transmitted by Park Commissioner Scanlan to the Board of Public Improvements. He also suggests that special care be devoted to the southwest section of Forest Park, which now is

most heavily covered with forest trees. He states that if the ground is plowed up and freed from grass and preserved from being tramped down by visitors the trees will become rejuvenated.

The Pennsylvania Legislature has passed the bill for the extension of the Capitol Park at Harrisburg.

On May 19, with appropriate ceremonies, Raton, N. M., dedicated three new parks to be known as Central Park, Ripley Park and Gat Hill Park. The dedication took place after a program at Central Park.

The city ordinance for beginning work on the Exposition Park at Rochester, N. Y., and which also includes an expenditure of over a quarter of a million dollars provides for the construction of shops for the Waterworks Department, stables for city horses, the remodeling of the building in Backus avenue formerly used as stables, the remodeling of the building known as the girls' dormitory, the preparation of a portion of the new site for use as city storage grounds and the construction of roadways and walks within the exposition grounds as well as all other work which is planned for this summer at the park.

Discussions pro and con in connection with the preparations for the Panama Canal exposition in San Francisco are becoming frequent. Nothing has as yet taken on enough of an official character to warrant particular notice.

The Wisconsin State Park Commission have not as yet made any large purchases of land for the Devil's Lake Park, but within a couple of years it is confidently expected that the state will have large public parks both at St. Croix Falls and Devil's Lake. Another state park will be provided in Door County.

The City Council of Grand Rapids, Mich., has wiped off from the assessment rolls the property bought from time to time recently for parks.

The amounts asked by department heads of the New York City Government for parks for the year beginning July 1, 1911, are as follows: Parks, Manhattan and Richmond, \$3,588,000; Brooklyn and Queens, \$1,410,160; Bronx, \$990,000.

Ware, Mass., uses a small poster 5½ inches by 5½ inches, freely displayed about its park to advise visitors of their duty. It reads: "Protect your park. Greenville Park, the property of the people. Do not endanger your park through careless use of match, pipe or cigar. See that no blossom, tree or bush is plucked or injured. Any flower or plant individually appropriated

deprives others of their rightful enjoyment."

The magnificent new passenger terminal of the Chicago & North-Western Railway, Chicago, Ill., was formally opened to the public on Sunday morning, June 4, at 6 a.m. Invitations were issued to the press to inspect the structure and its facilities on June 2. It was erected at a cost of over \$26,000,000, and is equipped in every way right up to date; it is a splendid addition to the growing group of Chicago's show places.

NEW PARKS

Clarence S. Wadsworth, Middletown, Conn., has purchased Pike's ravine in the western part of the city, and after improving it will present it to the city for a park.

The voters of Springfield, Ill., did a good thing when they carried a bond issue of \$40,000 to purchase Mildred Park, located at the extreme south end of the city, a tract of 110 acres, having an abundance of shade and a large lake. If properly developed and cared for it promises to be an ideal park.

Real estate for a small park and playground has been secured by the Rockford, Ill., Township Park Commission in the heart of the factory district. It will be immediately improved.

Hatton, N. D., is to have a park.

The City Council of Racine, Wis., has granted \$10,000 for the purchase of a park on the lake front.

The old temporary Capitol grounds will be improved and planted, which will give Austin, Texas, another interesting park.

The citizens of Lansing, Mich., have secured permission from the State Board of Auditors to improve one of the vacant squares in the heart of the city belonging to the state.

Deeds for the transfer of Kenilworth Park to Petaluma, Calif., were turned over to the City Attorney on May 2, and \$20,000, less the first installment. was paid to the Stover estate. Kenilworth Park will be maintained as a public park and recreation ground.

Some 20,000 acres in Monument Canon, near Grand Junction, Colo., is to be set aside for a national park.

The first of a number of parks proposed for Charles City, Ia., was secured early in May. The new park is a strip of woodland bordering on the south shore of the Cedar, beginning at Hildreth street and ending at Allison street or at the south end of the St. Mary's street steel bridge.

Saxby Park, Freeport, Ill., the gift

of Mr. Saxby, was dedicated on May 13.

A five-acre tract, about the old artesian wells from which the city formerly obtained its water, is being laid out for a public park at Caldwell, Idaho

Two additional small parks are promised for Mt. Clemens, Mich.

The firemen of Joplin, Mo., have helped the "City Beautiful" idea by securing a small park at the corner of Second and Joplin streets.

PARK IMPROVEMENTS

Extensive improvements in Capitol Park, Sacramento, Cal., include an underground conduit system; regrading of the cement walks around the front of the Capitol; reconstructing the back driveway; making a large lily pond; changing the front terraces so as to have a chain of "carpet bedding"; taking down the tall arc light poles and placing in their stead artistic electroliers-are among the plans which have been decided upon. These improvements, which will be carried out as soon as possible, will be paid for out of the \$25,000 fund appropriated for the purpose by the Legislature, which will be available on and after the first of July.

The new public comfort station at Cadwalader Park, Trenton, N. J., will soon be constructed by Joseph D. Smith & Son, to whom the contract was recently awarded. The public station will be centrally located, and will be 30 by 24 feet. It will have cost about \$5,000.

The Public Comfort station in Wilcox Park, Westerly, R. I., has been pushed rapidly, and some tree planting has also been done.

A scheme for centralizing the public buildings of Toronto, Canada, is being brought to the attention of the Dominion government. This in connection with a parkway which is to be made this summer in the neighborhood of the university will constitute a big start in the City Beautiful idea.

A miniature plaster model of the marble bandstand to be erected on Boston common is a memorial to the city's benefactor, George F. Parkman, has been on view in Mayor Fitzgerald's office and has met with general approval. The stand and pavement around it will cover about 3,000 square feet. The superstructure will be of pink marble and the base of granite. The ceiling and floor will be inlaid work and there will be 12 perforated pillars of bronze. Derby, Robinson

and Shepard, architects, have designed the building in the early Roman style—that of plain, chaste and delicate outlines, without a trace of modern ornamentation. The city council appropriated \$50,000 from the Parkman fund several months ago for the bandstand and other improvements for the Common. The stand will cost about \$25,000.

Three concrete buildings are to be erected in Riverside Park, Wichita, Kas.—A refectory building, a woman's pavilion and a bandstand. These buildings will be fitted out on modern lines and will greatly improve the conditions of the park.

Kane, Pa., is appreciating its park, and Mr. J. E. Henrietta, trustee, is taking great interest in providing amusements for the children, which are adding to the popularity of the park. In the future the children will have to be specially recognized in park affairs.

Kenilworth Park on the East side, south, Portland, Oregon, a recently purchased eight-acre tract, is now being improved by Mr. Emil T. Mische, park superintendent. All the modern requirements of a city park will in due time be provided and the planting plan will surely be attractive.

A new pavilion and comfort station to cost \$3,000 will be erected in Colt park, Hartford, Conn., and general improvements to the extent of \$1,000 will be carried out in this park during the season. Among the improvements is a new entrance from Wethersfield avenue.

A large amount of excavation is to be carried out at Onondaga and Lincoln Parks, Syracuse, N. Y., in all about 125,000 cubic yards.

The Beaverhead Club, of Dillon, Mont., approves of the plan for a park-to-park highway, which was recently started by the Hamilton (Mont.) Chamber of Commerce.

Mr. John Charles Olmsted, of Olmsted Bros., landscape architects, Boston, has lately visited Fairmount Park, Riverside, Cal., with a view to preparing a report and plans for its development.

Mr. Emil T. Mische, park superintendent of Portland, Oregon, has prepared plans by which Portland is to have a complete park, with sunken garden, fountain, formal plantation of flowers, trees and shrubs; terraces, wide sweep of lawn, pergolas, exedras, children's playground, wading pool and men's and women's gymnasiums.



HISTORY and GROWTH of LANDSCAPE ARCHITECTURE

A Definition and a Brief Resume of Its Past and Present; Presented Before the Congress of Technology, by Stephen Child, Landscape Architect and Consulting Engineer, of Boston

I.—Landscape Architect or Landscape Gardener?

There is at the present time much apparent misunderstanding of the terms Landscape Architecture and Landscape Gardening. It is not unusual to hear it stated that "this calling a man a landscape architect instead of a landscape gardener" is merely a fad "filling one's mind with images of quarries, stone cutters, creaking derricks, tapping trowels, and the like, instead of with pictures of free hand dealings with sunshine and shadow, trees, flowering shrubs and leaping fountains." One well known writer has even gone so far as to state that "the men most deeply engaged in the art have not decided what to call it," and that it is suspicioned "that the present fashion among the professional brethren of calling themselves landscape architects is promoted by two accidental causes: first, the feeling that architecture sounds bigger than gardening and can demand a better fee, and second, the fact that the architectural style of landscape work is the present vogue among wealthy clients."

I am going to ask you to look at this a little more carefully with me and see what is true in this discussion. In the first place, the term is not a "recent fad." Frederick Law Olmsted, the elder, called himself a landscape architect away back in 1856, when he first entered upon the work of developing Central Park in New York City, and the fact that he did so, and continued to so designate himself during the whole of his career has had much to do with the general adoption of the term. But the fact that one man, even an eminent one, adopted this title is perhaps not entirely sufficient, although those of us who are familiar with Mr. Olmsted's work and with his wonderful genius and mastery of the subject in all of its details may well feel assured that he did not adopt the title without most careful thought. Unfortunately he did not in his writings, so far as I am aware, really explain his reasons. He was so immersed in the great

battle then going on, for public parks for large cities, in showing their value and necessity and in laying down the principles and executing the work of these great undertakings that he apparently had little time to explain fully why he assumed the title. We may, however, be perfectly assured that he had reasons, and most excellent ones, and a little study of these may be interesting and profitable.

In the process of the development of mankind there has been noticeable a constantly increasing tendency toward differentiation and specialization, each step in the process being a slow one, and, as a rule, taken at first by some man or group of men trained in some other line. In this way have come about many new forms or fields of work, each adapted more or less from others of a previous and perhaps lesser civilization. Each new profession, or branch from an older one, demanded and received a new cognomen. This process of differentiation has developed more or less clearly defined groups of men, as, for example, the professions of the ministry, medicine, law, civil engineering, architecture and so on.

Fifty years ago, when Mr. Olmsted began his landscape work, there was beginning to be a demand in this country for men to do a certain line of work that was intrinsically quite different from that previously carried on by either the architect, the engineer or the gardener, and yet work that embodied some of the principles heretofore utilized by all of these men. Here was this great tract of land, now known as Central Park, to be developed and made beautiful, for the purpose of providing the crowded millions of the great city of the future with the opportunity "for a form of recreation to be obtained only through the influence of pleasing natural scenery upon the sensibilities of those quietly contemplating it." This was a new problem for this country, and indeed for any country,

for none of the great parks in Europe now utilized for this purpose were originally created for anything of this sort. They are chiefly the result of developing land that had originally been set aside as hunting forests by the great nobles or rulers of Europe.

I think it will be generally conceded that New York was fortunate in its selection of the master mind to work out this problem, and that Central Park has been most successfully designed and executed. Mr. Olmsted saw clearly the greatness of the task and the differentiation of this form of design from that of the architect or engineer and certainly from the work of the gardener. He chose to call himself a landscape architect. Let us, therefore, look into the meaning of these words and see whether they are not well selected and worthy of our respect and of general adoption.

That most delightful and interesting writer, Philip Gilbert Hamerton, says of landscape: "We use the word in two distinct senses,-a general and a particular. In the general sense the word, 'landscape' without the article, means the visible material world,-all that can be seen on the surface of the earth by a man who is himself upon the surface; and in the special sense 'a landscape' means a piece of the earth's surface that can be seen at once, and it is always understood that this piece will have a certain artistic unity or suggestion of unity in itself"; and further he adds, "although the word refers to the natural land, it does not exclude any human works that are upon the land." The word is derived from two good Anglo-Saxon parts, "land" and the suffix "scape," corresponding to "skip" or "ship," as in the word "friendship," meaning "the state or condition of being." Landscape then means "the state or condition of being land." When we come to add the word architecture, however, the connotation conveys to many people a wrong impression, but it

should not, for in its early and primitive meaning the word architect meant simply and solely "chief workman" or "master artisan." It is well, I believe, for us to recall this earlier meaning of the word at the present time

It is quite largely the architect himself who is responsible for any wrong impression that may have developed in the use of the term landscape architect; as many have assumed that, because the word 'architect' is used at all, the term 'landscape architect' means simply an architect who meddles a bit with the landscape immediately surrounding his buildings. Many architects have done this, with regrettable results both to the client and to the profession of landscape architecture. I think it is but fair to suggest that if the architect solves the problems of his buildings successfully, he may well leave to the landscape architect the matter of designing the surroundings for them. realizing that his own architectural problems are many and difficult, and that the trained landscape architect can, by co-operating with him, greatly improve the net result; for, as we all know, the effect of many a successful building has been seriously impaired by lack of a proper setting.

What Mr. Olmsted meant when he termed himself a landscape architect was that he was aiming to be a master artisan in matters pertaining to land and to human works thereon, having regard both to the beauty of its appearance and to its use. In a very real sense such work covers agriculture, forestry, gardening, engineering and the elements of agriculture.

Landscape architecture has been defined as "a group of activities which include horticulture, architecture, civil engineering and agriculture." Humphrey Repton, a great English authority on matters of this sort, says that in order to carry out this line of work one must possess not only artistic ability and taste, but "a complete knowledge of surveying, mechanics, hydraulics, botany and the general principles of architecture." We may well weigh his words, for Humphrey Repton was a cultivated Englishman gentlemen of great refinement and good taste. He was the first Englishman from such a grade of society to undertake the planning or designing of country estates. Kent, one of his predecessors in this line of work, was a coach painter by trade who possessed some artistic taste but little culture. "Capability" Brown, Repton's most famous immediate predecessor, was a gardener, who, by association with men of refinement and

by his tact and native ability, worked his way up to an honorable place; but Repton was a well-educated Englishmen, who had traveled and studied much. Repton, however, called himself a landscape gardener, as did all of the others at that time, but Mr. Olmsted chose to avoid that term for several reasons. In the first place, these workers in landscape design in England had confined their efforts almost entirely to the design of country estates. The term, landscape gardening, was, I believe, first used by the poet Shenstone to mean particularly an informal or picturesque treatment of the grounds of an estate, as distinguished from the older style of formal treatment that had been in vogue and carried to such excess. In the early part of the eighteenth century formality had been pushed to the point of puerility. A reaction set in, due to numerous causes, and the "new style," or socalled "English style," was introduced by Kent and others, who, as Sir Horace Walpole enthusiastically exclaimed, "leaped the wall and saw all nature was a garden," and so in fact it is in those delightful parts of old England in which they labored; those country estates with their deer parks and pleasure grounds. These men made a practice of designing country places in an informal or naturalistic manner, and termed this landscape gardening. They were in favor of abolishing all formality, and they themselves carried their theory to excess.

Later, in the latter part of the eighteenth century and the first of the nineteenth century, men like Repton came forward, realizing that formality had its place and value, and began to use it under certain circumstances but still called themselves landscape gardeners. This latter use of the term was a serious twisting of the original meaning; for a garden is, properly speaking, a place engirt, inclosed or set apart and highly cultivated. Landscape is, as we have seen, a piece of the earth's surface that can be seen at one time by a man who is himself standing upon the earth, and may, of course, mean a broad stretch of country not all inclosed.

There is another important point and one that has not been particularly mentioned in discussions of the term landscape architect, one to which I have already alluded, namely, that the English landscape designers mentioned were engaged almost exclusively in the preparation of plans for country estates. These

were, of course, not always large, and often were walled in or engirt (girt in), and, therefore, perhaps in a sense gardens. Mr. Olmsted in 1856 had before him not such a problem, but that of designing a great public park for a large city. This work was not gardening in any sense of the word; it was something quite different. It was work of design, a work that could be undertaken and successfully carried out only by a "master artisan in matters pertaining to land." Here were to be developed, and we know how well it has been done, broad peaceful landscape effects, giving the tired city dweller opportunity for restful contemplation and relief from city sights and sounds. These were to be designed and executed where none had existed before, and in such a way that there should be no obstructive evidence of man's elaborate control and no marring of the pleasing, restful effect by such garden elements as beds of geraniums or rare and striking shrubs clipped into formal shapes; in other words, no gardening, as we now understand that term. This was what he termed landscape architecture. The French landscape designers had already adopted this term, their phrase, architects paysagiste, meaning simply landscape architect.

Many of Mr. Olmsted's great works are familiar to us all. They include Central Park, New York: Prospect Park, Brooklyn; the almost unrivaled Park System of Boston; the great work designed by him at the World's Fair at Chicago; and almost innumerable country estates, notably Biltmore at Asheville, N. C., the mere enumeration of which serves to show some of the diversity of the work, and even the most casual observer can see in them some of the reasons why this sort of work is not properly to be called landscape gardening. A gardener, as commonly understood, is one who cultivates a garden. He may, and of course should, know a great deal about botany and horticulture, but when you come to associate the word garden with landscape there is implied simply that we have a gardener who cares for a garden having a naturalistic or landscape character; the absolutely essential factor of creative design disappears. Expensive mistakes have often resulted from. employing on landscape, work a person who was simply a common gardener and ignorant of the principles of this sort of design. Art commissioners would not think of employing a man

(Continued on page XIV.)

ASKED and ANSWERED

An exchange of experience on practical matters by our readers. You are invited to contribute questions and answers to this department.

How can I make Ampelopsis Veitchii (Japan or Boston Ivy) prolific in soil that is shady but exposed to the southern sun? Have met with poor success after trying for four or five years.—B. F. B., Pa.

The trouble must be that the soil is unfit for the Ampelopsis. This vine thrives in either sun or shade, though I think a partially shaded place the preferred one. I would suggest that your reader try a fresh lot of soil for the vine, throwing out the old material and filling in with some fresh garden soil. The vine is not particular as to soil, though that of a loamy nature is the most to its liking.

JOSEPH MEEHAN.

Is there anything that could be put on a Balm of Gilead stump that will destroy the roots and keep them from sprouting up 30 or 40 feet from the stump?—W. E. M., N. H.

Prune lower limbs close to trunk in a good smooth job. Cut off roots close to or underneath the ground twice a year. Anything applied to stop growth would destroy the tree or a portion of it.

HOWARD EVARTS WEED.

Is hedging advisable for boundaries for a cemetery?—J. H. D., O.

It seems to me very important to plant the boundary of a cemetery in such a way as to separate it as far as possible from surrounding property. A trimmed hedge requires too much care, and is forbidding in appearance, but a belt of planting made up of trees and shrubs may be beautiful in itself, and serve the purpose of a screen. If there is land enough so that room can be spared for evergreens, I should advise planting them, providing, of course, that soil and atmospheric conditions are favorable. If there is a good view from the cemetery that should be preserved, the boundary planting can be low. The cemeteries which seem most unsatisfactory to me are those surrounded with buildings whose occupants can look directly into the grounds, or those which are surrounded with farm land, from which they are separated by an open wire O. C. SIMONDS.

"Should a park superintendent be required to do police duty at all?"—J. M. P., Cal.

By no means. A park superintendent's duties are many and should not be added to by having to perform police duty except further than that park police should come strictly under his orders and all directions for the carrying out of park ordinances should emanate from him.

John W. Duncan, Supt. of Parks, Spokane, Wash.

"What is the best commission for governing park systems? Number on board and length of term of office?"—J. M. P., Cal.

Of the many forms of park commissions throughout the country my opinion is that the self-appointing commission, like that of Hartford and some other Connecticut cities, is the best. I believe that the number on a commission, however, should be limited to five members, because in all boards of directors or committees, no matter how large, the number of workers is limited to five. A non-paid board of the highest type of citizens gives the most satisfactory results. A self-appointed board after the first appointment by their creators appoint their own successors, one member's term expiring every year. True, there are many instances where single-headed and both large and small commissions have done their duty faithfully, earnestly and given excellent results, making the parks of their city a monument to their efforts, and after all, it is not the number of the commission or the way it is created, but the men or women that compose it that give the results. Keep your commissions free from politics, let them be composed of men or women of the highest type, men or women who in short are in sympathy with the work, lovers of outdoor life. believers in giving to future generations every opportunity for outdoor relaxation lovers of the beautiful, and your city will have a system of parks that will be the envy of all visitors and the best asset that has ever been invested in by your citizens.

Jони W. Duncan, Park Supt., Spokane, Wash.

What is the best way and yet a comparatively cheap way to construct a gutter along driveways in cemeteries?—W. M., Mo.

The sod gutter for all cases is much to be preferred to brick or stone. Sod gutters with catch basins and tile underdrain to carry water away before it accumulates in large quantities are gaining in favor. Where Tarvia roads are constructed a gutter can be formed in connection with the pavement to meet all requirements.

SID J. HARE.

Is it practicable for a cemetery board in a small city to handle slate grave vaults?—W. M., Mo.

This is wholly a problem of the locality to be decided by the demand for such grave vaults. I would not consider it a paying investment to keep on hand a supply of vaults necessary to meet all demands. The brick grave vault, the concrete grave vault, or the reinforced concrete case have a place in competition with the stone or slate grave vaults, the last gaining in favor owing to its being more nearly a water tight compartment.

SID J. HARE.

Should cemetery officials encourage or discourage the building of community mausoleums?—H. A. C., O.

[Answers to this query are invited from any of our readers who have opinions, experience or information on this subject.]

Charles W. Cooper, Oakland, Cal., in "Popular Mechanics" says: "An easy way to kill dandelions in lawns is to apply kerosene to the roots of the plant. Cut the root about 1 inbelow the surface and apply a few drops of the oil before the earth is pressed in place. The plant will not grow from a root treated in this manner."

PERSONAL

A note under this head in the last issue stated that the firm of Hare & Hare, landscape architects of Kansas City, Mo., had succeeded Mr. Geo. E. Kessler in the carrying out of the park system of that city. To the fact of Kansas City being located, as it is, in two states, must be charged the blunder. The note should have recorded that Hare & Hare succeeded Mr. Kessler as landscape architects of Kansas City, Kansas.

Myron H. West, former superintendent of Lincoln Park, Chicago, who resigned from that position, as noted in these pages last month, has formed a company for the practice of landscape architecture, forestry, landscape engineering and outdoor improvements of every character. The organization is known as the Western Gardening & Forestry Co., and has offices at 815 Steinway Hall, Chicago. Mr. West is president of the company, and H. G. Noble, man-

(Continued on page XVI)



AROUSING SENTIMENT FOR CEMETERY REFORM

If every local newspaper in the country were as interested in showing the people of the community the condition of their cemetery and as energetic in pointing out neglected spots with strong words and pictures as the Herald, of Decatur, Ill., the weed-grown gravevards, and the tumble-down stone yard burial grounds would soon be relics of ancient history. The Herald recently devoted several articles, one of them nearly a page, to showing up the conditions of neglect that had been allowed to creep into the local cemetery, and showed with photographic reproductions the exact spots that needed improvement and what they needed to make them better. One of the Herald articles is illustrated with three photographs whose titles illustrate the detailed method of showing up conditions that ought to be remedied. Under one of the pictures appears the title "A concrete walk and wall needed at the entrance drive." Another was labeled: "A retaining wall badly needed here," and another illustrated a "Sample of a good retaining wall which might profitably be extended to other parts of the cemetery."

While an expert cemetery landscape architect might differ with the *Herald* as to the exact nature of some of the



ENTRANCE DRIVE IN DECATUR, ILL., CEMETERY, SHOWING NEED FOR BETTER GRADING TO JOIN DRIVE AND LAWN.

improvements needed, there can be no question about the fact that some are needed and that lively agitation of the matter as this newspaper has undertaken will result in some substantial improvement. If the *Herald* would next arouse agitation for the employment of a landscape architect who is a cemetery specialist to come and report on condi-

tions and make plans for the necessary improvement, its efforts would be as wisely directed as they are now energetic and useful.

The chief article on the Decatur cemetery was followed by another showing what had been accomplished and contrasting conditions with pictures in Oak Hill Cemetery in the neighboring city of Springfield.

We give herewith some extracts from the *Herald's* story and a couple of the pictures to show the manner and the spirit in which the matter was handled. Cemetery officials who have the problem of awakening a lethargic public to the run-down conditions in the local cemetery, will do well to send for copies of the Decatur, Ill., *Herald* of Sunday, April 16, and April 23.

Following is part of what the *Herald'* had to say:

A more fitting motto at the entrance to Greenwood cemetery would be "All ye whoenter here, expecting to find more beauty than ugliness, leave all hope behind." As one enters the cemetery he is im-

As one enters the cemetery he is impressed with the fact that the entrance is merely a continuation of Spring avenue and that the character of the soil differs but little. The main avenue is graveled, but at this season of the year it is undeniably soft and muddy.

It has long been contended that this walk should be paved, or at least treated with



ANOTHER EXAMPLE OF POORLY GRADED LAWN ANDROADWAY.

some material more durable than gravel and that a suitable sidewalk should be constructed. These improvements certainly would lend dignity and beauty to the entrance.

True it is, that it costs money to run a cemetery the same as any other business. Sentiment enters into a lodging place. It is to these sort named that this article is directed.

GREENWOOD'S NEEDS.

In Greenwood there are ugly walks, places by the score where retaining walls are badly needed, places where "fills" should be made and unmade, places where trees should be planted, places where new walks should be made, places where tombstones should be straightened and repaired, places where some care should be given to lot after lot.

The question has been asked in the col-umns of the Herald, "who is responsible for the care of the cemetery?" The cemetery association declares most emphatically that it is responsible no further than to keep the walks and drives in good condition. association has been severely censured. tlmes without number, probably, for not looking after the private lots of owners, especially lot owners whose dead rest in Greenwood, and who have since moved to other sections of the country. The cemetery association has also been charged many times with failure to keep the walks and drives in good condition. Many hundreds of dollars, probably thousands, are spent each year in repairs and improvements in Greenwood, yet with all the money spent by both the association and lot owners, the cemein comparison with others is unatterv tractive.

From 1857 to 1880, there was no known record of the dead in Greenwood, but after that date Mr. Montgomery has kept a careful record and anyone really interested may go over such records in Mr. Montgomery's office.

There is no uniform price at which lots in Greenwood sell. This would be impossible, for some lots are in a more choice focation than others. The association has been criticised many times because of the high prices it charged for lots. In the early history of the organization lots sold as low as \$10, but this price has been raised steadily until now, for choice lots, the price is

placed at a large figure. In some cases the lots are worth, apparently all that is asked for them, but in some cases it seems that the prices asked and paid are out of all reason.

Greenwood Cemetery Association has been censured a great deal because it sold the coal rights under certain of its properties. Mr. Montgomery is authority for the statement that the coal rights had already been sold by Theron Powers before the association acquired possession of the 17-acre tract it bought of him and that later on the association sold some coal rights under other parts of the cemetery so the M. & C. coal company might the more easily reach other of its lands where it owned coal rights. Mr. Montgomery said, too, that anyone wishing to see any of these transfers may do so at his office.

Andy Lemming, superintendent of the cemetery, has been doing more in the way of putting the cemetery in a presentable condition than has been done in the past 20 years. This is the opinion of every person who has a call to pass any time whatever in the cemetery and who is familiar with conditions. Mr. Lemming has been with the cemetery association for 23 years and will soon finish his first year as president.

DEAD LIMBS CUT OFF.

During the time he worked under superintendent it was impossible for him to go ahead and plan and execute any work, but since he has been clothed with the authority of superintendent he has done a great deal to help out the looks of the He recently had his force of men take ladders and ropes and go up in the trees and cut and lower as many dead branches as they were able to find and then haul them to the dumping ground near the river. Afterwards, the old wire frames, flower pots, cans, dead grass, etc., were taken from the graves and hauled to the dump, and altogether there was 27 loads of brush and trash carted away. At this season of the year it is almost impossible to distinguish the live limbs from the dead, but careful investigation will show that the majority of the dead limbs have been cleaned up.

The Herald has been asked who is responsible for the appearance of the cemetery. There is no question but the ceme-

tery association is responsible for the appearance of all the walks and drives,

LOT OWNERS NEGLECTFUL.

It would seem that the lot owners are individually responsible for keeping their lots in order. Many take pride in doing so, but others do not. There are many prominent people buried in Greenwood. What might be one of the most attractive lots in the entire cemetery is the one in which the first wife of Governor Oglesby and two of his children are buried, yet it is one of the poorest kept lots in the entire cemetery. According to an official of the association no care or expense has been bestowed upon the lot by the family for years, yet the grass has been cut on this lot several times each year at the expense of the cemetery association.

It seems strange that so much land has been allowed to go to waste in Greenwood and that a better system of landscaping has not been adopted. No work along that line has apparently been done and for the most part everything is as nature made it. In numerous places there are chances for nature to be improved upon, but all those chances have been neglected.

A great deal of money has been spent in Greenwood. A safe estimate of the cost of tombstones, monuments and mausoleums could be placed at \$750,000 with no fear of successful contradiction, and yet it is not a beautiful place by any means.

PLAN FOR CHAPEL FAILS TO MATURE.

There are six mausoleums in the cemetery, five of them private. The private buildings belong to Mrs. A. W. Conklin, W. F. Busher, John R. Miller, Martin Schroeder and Vandeveer & Brownback. The public mausoleum is owned by Fred Walters and houses nearly 50 dead.

On the road or drive which turns to the right at the Schroeder mausoleum and about 100 feet west of the turn in the drive, is a vacant plot of ground. It had been the intention of the cemetery association to build a chapel on this ground for the accommodation of the public, either for funerals or protection in case of a storm, but the board has practically changed its mind, so that it is understood the ground will be sold to persons wishing to build private mausoleums on it. The plat of ground is about 65x95 feet and can be sold to great advantage.

FINE TYPE OF RECEIVING VAULT ARCHITECTURE

So few receiving vaults have any pretensions to architectural character that would make them adornments to the landscape that the fine vault in Allegheny Cemetery, Pittsburg, illustrated here is of particular interest. This spacious, handsome structure of Gothic design was built in 1905 and stands in the west corner of Section 39. It is altogether above ground, and retains in front much the appearance of the face of the old vault. The external measurements are 34 feet long, 301/2 feet wide. There are 54 crypts, in three tiers, with ample room, should occasion require for 18 more crypts. Thirty-six of these crypts are 7 feet 10 inches deep, 311/2 inches wide, and 27 inches high; eighteen are larger so as to accommodate the largest made burial cases, they are 7 feet 10 inches deep, 35 inches wide, and 27 inches high. In-

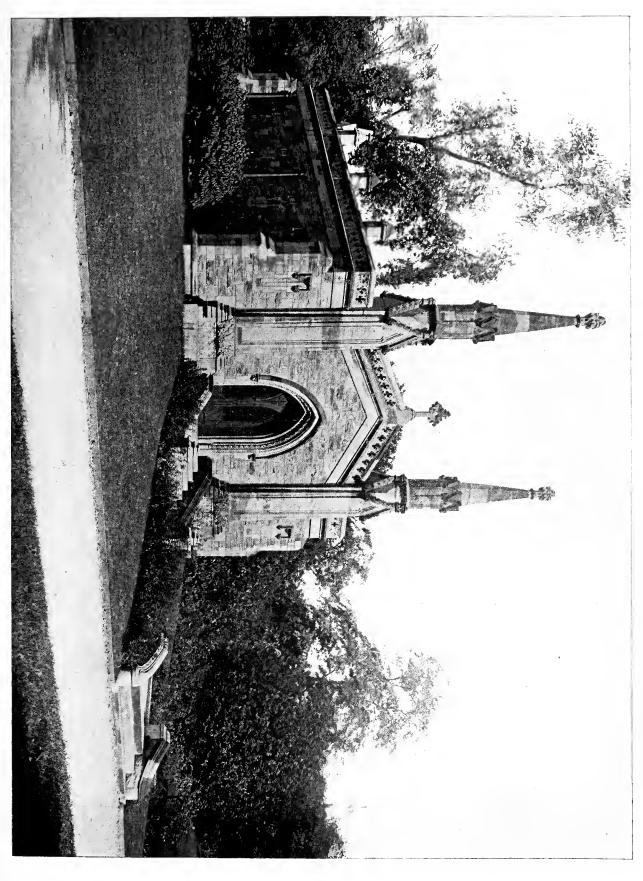
side of each there is a fixed roller to permit of readily putting in or taking out the casket. In addition to the main aisle containing the crypts, there are two side rooms, one of which is fitted up with marble columbarium niches where urns containing the remains of cremated bodies are kept. These are 10 inches high, 14 inches wide and 12 inches deep. There is room for many more niches in these wings should they be needed, and they can be constructed in sizes to suit the urns.

The stone—a hard, close grained, gray sandstone—used in the building of this receiving vault came from the Friendship Hill quarries, Fayette County, Pa., the property of the late President of the Cemetery Association, Mr. Charles E. Speer, and was generously donated by him to the cemetery for this purpose.

For each interment in the vault, time not to exceed one week, the cost is \$10. For each week or part of the next three weeks, \$1.00, and after that time \$2.00 per week. For opening and closing the vault at any one time, a charge of one dollar is made. The body of any person that died of a contagious disease is not permitted in the vault.

If a lot holder wishes to erect a mausoleum on his lot and in it inter the bodies now buried in this lot, these bodies may be disinterred and placed into hermetically sealed cases and put into the receiving vault pending the construction of the mausoleum; the charges therefor are \$5.00 for each casket the first week and one dollar a week or part thereof, for each succeeding week.

The picture opposite shows an excellent view of the vault and site.



LAKEWOOD, THE COMPLETE LAWN PLAN CEMETERY

Probably no cemetery in the country is more scrupulously developed on the lawn plan than Lakewood of Minneapolis. It is known among the large cemeteries of the country as the one that is completely "on the level". It is old enough to have attained a

wood. The beautiful mortuary chapel and crematory described in our last issue, is a fair example of the way every improvement has been carried out in these grounds.

In addition to the booklet descriptive of the chapel discussed in our last

maintained even where monuments are freely used. It also illustrates admirably the lesson we have frequently urged in these pages that the better the cemetery the better the class of monuments that will be erected in it. The massive, simple monuments



SECTION SEVENTEEN, LAKEWOOD; A LEVEL LAWN AND A BETTER CLASS OF MONUMENTS.

mature development of its natural features, and yet not so old as to have its ancient, uncared for sections that were filled up in the old graveyard days before the park idea of cemetery development was born. Lakewood, by the wisdom of its founders, leading citizens of Minneapolis, many of whom are still identified with its management, was right from the start. It has been improving through the succeeding years, as steadily as intelligent and careful management, and perfect landscape gardening could bring about.

No improvement that careful thought of the best minds in the community or generous expenditure could produce, has been denied to Lakeissue, Lakewood has just issued an illustrated book of the grounds, executed in the finest style of the graphic arts. This shows some park views of rare beauty that illustrate to a remarkable degree how everything has been subordinated to the single idea of perfect landscape development. The book is a fine example of publicity for cemetery beauty in every respect, and contains in addition valuable historic information about the details of management embodied in the modern regulations.

The pictures shown here from the Lakewood book, are typical of the book and of the grounds. The view in Section 17 shows clearly how the unbroken lawn and fine trees are

shown in this view, are all of the better class of cemetery memorials. The scene is marred by none of the misshapen stock forms of the "cottage" style or stock angels atop of ill-proportioned, over-decorated pedestals.

Another picture shows the lodge in the foreground, and the rest house in the distance. Both have been framed into the scene and almost concealed with a luxury of careful planting that makes them an integral part of the landscape picture. The lodge is built of Jasper with a tile roof and cost about \$3,000.

The rest house seen at closer range in another of our pictures is built of brick with outer walls of splashed concrete, and roof of Spanish tile. The floors are of concrete, and the toilets of marble and tile. The cost of the structure was \$2,500.

The Lowrie-Goodrich mausoleum, one of the finest private mausoleums in the country, has been given a rarely impressive site and setting. It has ample room on a lot 150 by 120 feet, on a knoll that is planted with a fine growth of trees. There is nothing in

lencies. It was organized upon a broad, and as near a public basis as possible and not be controlled by the municipality. In every other sense it is a public institution and belongs to the people.

The volunteer organizers who established Lakewood, and who have for forty years given their best thought, energy, and devoted atten-

spot in the vicinity of a city whose surroundings have no equal in beauty East or West, was obtained.

The establishment of Lakewood dates from July, 1871, when a few of the leading citizens of Minneapolis held an informal meeting and appointed a committee to procure a suitable location for a cemetery.

An association was organized called



LODGE AT CALHOUN ENTRANCE TO LAKEWOOD; ROOF OF REST HOUSE IN BACKGROUND AT LEFT.

the surrounding scene to mar the effect. The picture is one of the finest monument views in any cemetery by reason of the simple, natural dignity of both structure and setting. It is a rare view and one might well imagine would be rarer still when the foliage is heavier on the surrounding trees. The tomb itself is a fine type of classic architecture and cost about \$40,000.

As Lakewood was established forty years after the first rural cemetery association in the United States was organized, at Boston, its founders had the experience of those pioneers, and others at Philadelphia, Brooklyn and Pittsburg, and could profit by their mistakes as well as adopt their excel-

tion to its growth and conservation, have done it solely for public good, with no reward other than comes to all good citizenship. It pays no dividends; its revenues are in trust and can only be used for the development and care of the cemetery; and no board of trustees can in any way divert them to other purposes.

Thus the charge for lots and for services are as low as a conservative business policy will allow.

Nature has given to Lakewood a setting that approaches the ideal. Its location was chosen at a time when there were no restrictions to control, or selfish interests to interfere with the selection of the site or its development. Thus the most beautiful

"Lyndale Cemetery Association," a little later changed to "Lakewood," the change being approved by Act of Legislature, February 26, 1872. The organization being completed, the committee on location reported, that after careful examination of various tracts of land, they had decided upon one, owned by William S. King, lying between Lakes Calhoun and Harriet, the finest water features of the wonderful Minneapolis park system. They recommended that a tract of one hundred and thirty acres-which the generosity of Mr. King had made possible—be purchased. This was resolved upon, and stock to cover the expenses was soon subscribed.

Those who originally advanced the

money to buy the tract, received back that which they advanced, but nothing more. The Trustees of the Association have given their time and their brains and their business ability to the management of the cemetery affairs without recompense; and those trustees, from the beginning until now, have been among the ablest and most successful business men of the city. The revenues have all gone into the care and beautification of the grounds, and into permanent funds that will provide for needed improvement in the future.

The consecration services attending the opening of Lakewood Cemetery were held on September 16, 1872. The tract selected for the new place of interment was a beautifully wooded knoll of 128 acres touching

mentation and surroundings for the purpose for which it is dedicated. On the west the broad expanse of Lake Calhoun with its blue waters and densely wooded shores, and on the south the smaller Lake Harriet entirely surrounded by tree clad hills, gave to this spot in its natural state a beauty that the observers felt could scarcely be added to in subsequent years by the landscape decorator's art.

In the forty years that have intervened, great improvements have been made, until it is unsurpassed by any cemetery, not only in this country, but in the world. This is not only due to its location between beautiful lakes and its undulating surface, but also to the good taste and skill with which it has been improved from year

owners in the Lakewood booklet' embody briefly some important information that all lot owners should have to assist them in appreciating and understanding modern cemetery management:

To secure a general good effect in the cemetery it is essential that every lot should be well cared for, as a single neglected lot mars the beauty of the whole section. It is a duty which every lot owner owes to the cemetery association, to every other lot owner, and to himself and his family, to preserve from neglect the home of his dead. The general care of lots (which covers mowing the grass, removing fallen leaves, branches, etc.) is assumed by the association. For all other work an extra charge is made.

Unusual outlays are from time to time rendered necessary on every lot by the impoverishment of the soil, the decay of trees or the effect of time on vaults, monuments and headstones. In order to provide for these contingencies through all time, it is advisable that each lot owner deposit a sum with the cemetery association, or leave it to



THE REST HOUSE AND ITS LANDSCAPE FRAME, LAKEWOOD CEMETERY, MINNEAPOLIS.

Lakes Calhoun and Harriet. The topography of the land presented a rolling surface, studded with beautiful groves of young oaks, and then, as now, in the opinion of all who saw it, the sun does not shine on a lovelier cemetery situation, or one more perfectly adapted by natural orna-

to year. In the subsequent development of Lakewood, adjoining tracts were purchased, improvements were made, new plans for beautifying adopted, the massive gateway constructed, culminating in the new mortuary chapel.

The following suggestions to lot

them by will, the principal to remain untouched, and the interest to be used upon his lot as occasion may require.

This is becoming a general practice among the lot owners of leading cemeteries of the east. In Forest Hill Cemetery, Boston, every purchaser is required to deposit a certain sum for the perpetual care of the lot before he receives a deed of it.

In the best cemeteries in the country the surface above graves is now kept flat, as it

is, almost impossible to make grass live or to mow it properly on mounds; and a smooth, unbroken surface is far more beautiful. Mounds are not necessary to mark the place of interment, as an accurate record is kept of every grave.

Planting within the narrow limits of a cemetery lot, so as to avoid overcrowding and encroachment on adjoining lots, requires an intimate knowledge of the habits of trees and shrubs, and the size which they attain, and it should be done only with the approval and under the direction of the superintendent.

Great care should be taken in selecting designs for monuments. A monument should be designed with reference to its surroundings, consideration being given to the number, size and character of other monuments standing near it. A good design need cost no more, and it may cost less than a bad one. Where a monument is to be placed on a lot, headstones, if used at all, should be made very low—the lower the better for permanence, for the appearance of the lot and for the effect of the monument. Lot owners are earnestly advised never to duplicate a monument already in the cemetery. Justice to the owner forbids copying a design for which he has paid; and multiply-

their proper officers, to remove such trees or shrubs, or such parts thereof as in their judgment are unsightly, detrimental or inconvenient; and if any lot, or any structure thereon shall, by the absence or neglect of the proprietor, become unsightly or inconvenient, it shall be the duty of said trustees, and they shall have the right by their proper officers, to put said lot or structures in proper order and repair, and make a reasonable charge for the same, or to remove the same from the lot.

Sec. 6. No vehicle shall proceed at a speed exceeding six miles an hour while in the cemetery.

Sec. 8. Tombs or mausoleums may be constructed only in such places and in such style as shall be approved by the trustees, complete plans and specifications of the same being furnished to the superintendent on application for permission for their construction, but no bodies shall be placed therein except in sealed caskets and in hermetically sealed single compartments in a manner satisfactory to the superintendent.

Sec. 9. But one monument will be allowed upon a lot, and this must be placed in space reserved for monument as shown on plat, unless special permission is given by the superintendent for placing it otherwise.

will not be allowed over one foot in height from the surface of the ground, nor less than six inches in thickness, except where they are made to correspond with other stones already on the lot, and must be placed on foundations.

On section 14, and all sections hereafter platted, markers must be set level with the sod, the monument only, being allowed to project above the ground.

Sec. 17. Flowers may be planted only on graves or in vases, according to the taste of the lot owner, but not more than one vase will be allowed upon a lot. Running vines or hardy spreading plants on graves are in the way in the proper care of lots, and the association reserves the right to remove such when found objectionable. Unfilled vases will not be allowed to remain on lots after June 15th, but will be removed from lot and held subject to order of owner.

Sec. 18. Florists engaged by lot owners to plant on graves or in vases will be required to leave list of all graves and vases planted (with superintendent) before doing the work, and will not be allowed to remove anything from any lot without written order from lot owners.

No more wooden vases or urns will be permitted in the cemetery.



LOWRY-GOODRICH MAUSOLEUM, LAKEWOOD CEMETERY; A FITTING SITE FOR A FINE MEMORIAL.

ing any one design only leads to a tiresome monotony.

Privileges and Restrictions of Lot Owners. Sec. 2. Enclosures of any other description are considered unsightly and useless, and are therefore prohibited.

Sec. 5. If any tree or shrub, situated in any lot, shall become detrimental to any adjacent lot or avenue, or unsightly or inconvenient, it shall be the duty of said trustees, and they shall have the right by

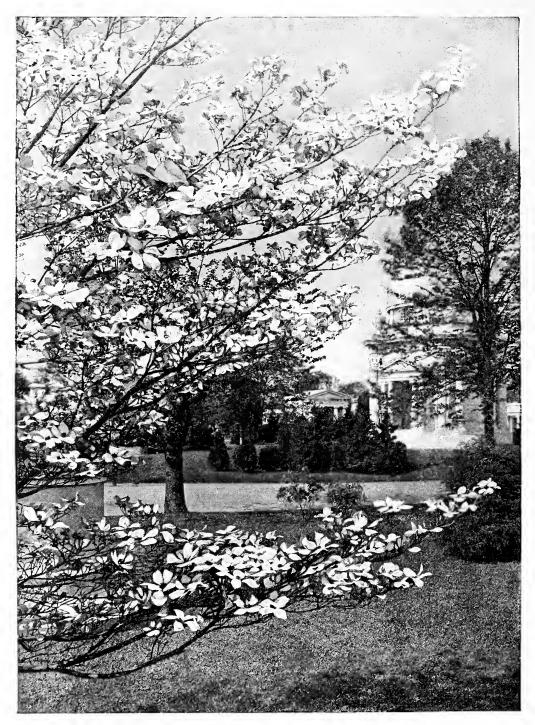
No monument will be allowed upon a lot platted for less than six burials. Any stone more than twelve inches thick will be considered a monument.

Sec. 10. "No monument or headstone nor portion thereof, and no portion of any vault or tomb above ground shall be constructed of limestone, sandstone, or any artificial material."

Sec. 16. On sections Nos. 1 to 13 inclusive, and No. 15, headstones or markers for graves

Sec. 22. General care of the entire grounds and lots is assumed by the association, twenty per cent of the receipts from all lot sales being by law set aside and placed in trust, and the interest thereof devoted to their perpetual care. This, however, does not provide for special care of monuments, flowers, etc., which may be placed on lots by proprietors. In order that lot owners may secure such special care for all time,

 $(Concluded\ on\ page\ XVIII.)$



The art of concealment, one of the chief of the arts that make a fine landscape picture, either on canvas or on the landscape itself, is well illustrated in this view from the latest picture book of Woodlawn Cemetery, New York. The dogwood blooms, projecting into the picture at the left, break the view in that direction, and lend the effect of distance, by contrasting with the objects in the background. The disappearing curve in the road suggests an incomplete picture with its promise of something beyond. The low, classic mausoleum is almost concealed by the shrubbery planting in the center, and the domed outline of the Cornelia F. Coster mausoleum is both hidden and harmonized with the landscape by the perfect domed form of the fine tree that gets just fir enough into the picture to be useful.

CEMETERY NOTES

A. A. C. S., Philadelphia, Sept. 12

The executive committee of the A. A. C. S. arranging for the annual meeting to be held in Philadelphia, September 12, 13, 14 and 15, have decided on the Continental Hotel, at Ninth and Chestnut streets, as headquarters. Rates and other details will be submitted later.

The committee reports that matters are progressing nicely, and a very interesting program is promised. George M. Painter, Westminster Cemetery, is chairman of the committee, and Charles B. Jefferson, of West Laurel Hill, secretary.

The government is very strict in its rules and regulations covering the National Cemetery at Arlington, Washington, D. C. It will not permit the use of any vases, urns, tubs, hanging baskets, or "other fixture intended for plants, or any chair, set tee, or other obstruction." The order to this effect was made in October 1908, and the removal of such obstructions published. This order further forbids the planting of "trees, shrubs, vines, or other plants of any character or description" on any burial lot.

The Supreme Court of Minnesota has decided that the Oakland Cemetery company of St. Paul, Minn., may hold the land it bought a few years ago adjoining its burial ground free from taxation, but it must not use it for cemetery purposes until given permission by the city council of St. Paul. On the other hand the city cannot legally condemn and use any portion of the land for a thoroughfare. These findings are given in a decision of the Supreme Court handed down May 12.

To regulate the automobile traffic in the grounds of the cemetery of Spring Grove, Cincinnati, O., automobile tickets are issued—white cards for single admissions to be given up on exit, and blue cards, lot owners' tickets, the latter containing on the face lot owners' and chauffeur's names, location of lot and license number. Upon the backs of these cards are printed the rules governing the admission of automobiles to the cemetery. The rules are necessarily restrictive, but suggest no arbitrariness beyond the positive regulation required by the circumstances.

A "Floral Day" is slowly becoming

a stated observance in some cemeteries, and it might be very profitably adopted in very many more. June 8th was set apart at Greenwood Cemetery, Knoxville, Tenn., and an appropriate program was carried out and services held in a temporary chapel. Public interest in the cemetery is sure to be increased by such efforts.

It is not often that professional safe-blowers make a raid upon the cemeteries, but we have to record that early on the morning of May 31, the safes in the cemetery offices of Elmwood and Mount Olive suburban cemeteries of Chicago and two miles apart, were blown open with nitroglycerine in one case, and the combination worked through a drill hole in the other. The burglars secured \$350 from Elmwood and over \$200 from Mount Olive. Mr. Bellett Lawson, Jr., superintendent of Elmwood, said: "They were experts. It was the slickest, cleanest piece of work imaginable." Nothing was known of it until morning.

Investigations into the conditions of the city cemetery located one mile north of Krug Park, St. Joseph, Mo., has shown a deplorable condition of things. Lack of funds is no excuse. for money should be found somehow to keep municipal burial grounds at least decent. Gravestones almost hidden by sod, dirt and pine needles, many of them so shattered that it would be impossible to identify them, and stones torn down and used, near the spot where they were erected, as bases for juvenile baseball games which have been played so regularly in the past that the base paths between two stones are well worn, are the shocking evidences in view at the old Mulberry street burying ground, Brockton, Mass., which have been brought to the attention of the authorities. Only three headstones remain standing in the entire cemetery.

The Davey Tree Expert Co., of Kent, O., were called in by the Woman's Auxiliary of Greenwood Cemetery, Galena, Ill., to treat the trees of that cemetery of which there are some magnificent specimens.

A real estate scheme to dispose of lots in a new cemetery is described in a St. Louis paper. Four thousand lots in Greenwood, East St. Louis, are to be disposed of on easy pay-

ments, one dollar down and a dollar a month. The new cemetery to be located on the bluff east of East St. Louis, about three-fourths of a mile north of Edgemont, is to be "The Greenwood." An East St. Louis real estate firm has purchased the ground and it is being put in shape. There will be an ornamental main entrance, and each lot will be marked. The tract will be divided into 4,000 family lots, each containing 200 square feet, and they are to be sold at \$25 each.

The injunction suit of C. P. Wilson against the city of Fort Smith, Ark., to restrain the completion of the purchase of the addition to Oak cemetery was heard May 8 on the city's motion to revoke the temporary restraining order. The motion was denied and the injunction made permanent. The city may take the case to the Supreme Court

Forest fires raged on the outskirts of Great Barrington, Mass., and North Adams, Mass., the latter part of May. One fire on the outskirts of Great Barrington was started by an old man who was trimming and cleaning up about his wife's grave. The poor old man perished in the fire he had started.

NEW CEMETERIES

The new burial ground of the congregation Jesuhat Israel in the Braman cemetery, Newport, R. I., was formally dedicated May 21 in the presence of a large number of people. The plat is set apart from the remainder of the cemetery by a handsome iron fence, with stone posts, and the grounds are well kept.

The Amish congregation at Morton. Ill., has recently opened a new cemetery at Morton. The cemetery is to be tiled, so that there will be no water settle above a depth of seven feet, the land being somewhat low. The cemetery is ten acres in extent and well laid out.

A farm of about 200 acres in Fayetteville, about five miles from Syracuse, N. Y., was presented to the Roman Catholic diocese of Syracuse by Rt. Rev. Bishop Patrick Ludden at a meeting of the bishop's council held in Syracuse early in May. At his request it will be called St. Mary's cemetery. It will be governed by a board of managers consisting of the clergy of the Roman Catholic churches of Syracuse and one layman from each city parish.

Gary, Ind., the wonder steel city of the sand hills that recently sprung up with such rapidity as to get itself famous in the magazines, has made a beginning on the development of its first cemetery, the Gary Oak Hill Cemetery, a tract of 40 acres at Forty-fifth and Harrison Sts. Twenty acres of the grounds have been improved, roads built, an iron gateway constructed, and trees, shrubs and flowers planted. Charles A. Johnson is president of the stock company developing the grounds; Jos. P. Grantham, vice-president and general manager; Baker T. White, secretary C. O. Holmes, treasurer, and Peter Burg, Sexton

CEMETERY IMPROVEMENTS

The St. Matthews Cemetery, St. Louis, Mo., J. A. Schmiemeier, Supt., is building an office and waiting room for the superintendent and the public, to cost approximately \$1,100. It is also grading and laying out about eighteen acres of new ground to extend the cemetery. The total expenditures will be near the \$10,000 mark.

The Women's Improvement Club of Sutter City, Cal., has decided to purchase from the government several lots adjoining the cemetery for the purpose of enlarging it.

Action has at last been taken looking to future up-keep of the old Center street cemetery, Wallingford, Conn. Early in May a number of citizens subscribed to articles of incorporation and formed the Center Street Cemetery Association of Wallingford. This association acting in conjunction with the board of selectmen may receive moneys and look after the up-keep of the cemetery and make various improvements at the yard from time to time as they may elect.

Dr. H. D. Hinckley, president of the Board of Trustees of Oxford Cemetery Association, Oxford, O., recently announced that a contribution of \$1,000 had been made by a prominent citizen of the village, who desires his name withheld for the present, which is to be paid over if \$9,000 more are subscribed for a permanent endowment fund to be used in keeping up the cemetery property. The board of trustees are at work to raise the necessary \$9,000.

The citizens of Sedgwick, Kas., have determined to improve their burial ground, and have been collecting labor and donations for the purpose.

The St. John's cemetery committee, Clinton, Mass., has decided to erect a building for the use of the committee, the convenience of visitors at the cemetery, and there will also be quarters in the cellar for tools. The building will be 24x30 feet, two stories high. The first floor is to be one large room and the upper floor will contain two rooms, both of which will be fitted up for offices and will be used by the committee. The lower floor will be fitted up as a waiting room. The new building is to be located near the entrance of the cemetery.

The cemeteries of Kerman, Cal., are to be beautified and cared for. The Bethany Lutheran church, which owns the burying ground in Vinland, has recently decided to improve the property while the Farms Company is laying out a cemetery for town use, a short distance southeast of Kerman. A water tank will be installed and the work of the improvement will be left to the Woman's Improvement Club.

Charles G. Wright, manager of the Oakwood crematorium of Tacoma, Wash., has recently visited San Diego, Cal., arranging for the commencement of work on a crematorium in Greenwood cemetery, where a piece of ground 200 feet square has been purchased for the purpose. Work has begun and the building is to cost \$50,000. It will be modeled on the lines of the Tacoma crematorium, but will be still more modern.

Work is under way for a concrete enclosure wall for Fairlawn Cemetery, Oklahoma City, Okla., which will be followed by handsome gates at each entrance. The directors appear to be determined to beautify the property.

The Ann Rogers Clark chapter, Daughters of the American Revolution, reclaimed the old city cemetery, in Mulberry street, Jeffersonville, Ind., two squares from the principal business street of the city, from years of neglect. Memorial Day exercises were held and a flagpole raised there May 27.

With the completion of the new entrance gates and several hundred feet of gravel driveways in Hazelwood cemetery, Springfield, Mo., a great improvement to the burial place has been made under the direction of the cemetery committee of the city council.

Architects Krempel & Erkes, Los Angeles, Cal., are preparing plans for a mausoleum to be built at the Jewish cemetery for the Harris estate. It will contain ten catacombs, four in the crypt and six above. The construction will be of reinforced concrete.

In accordance with an action taken at

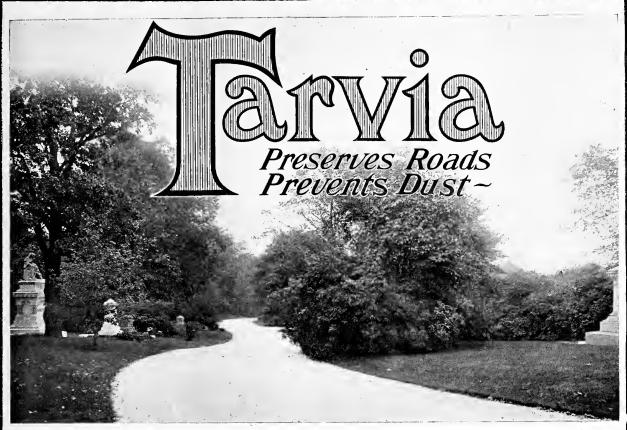
the last meeting of the board of directors of Spring Grove Cemetery Association of Cincinnati, O., automobiles will now be admitted, provided owners and chauffeurs comply with certain rules. It is reported that leading undertakers say that the result will be the introduction of auto funeral cars in the near future in that city, and that the barrier against automobiles at the Cincinnati cemeteries has prevented local undertakers from getting modern motor vehicles such as are used in other large cities and that doubtless they will now supply not only autos instead of carriages for the use of mourners, but also auto-hearses.

CEMETERY REPORTS

The Cemetery Board of Managers of Hamilton Cemetery, Hamilton, Ontario, has recently issued its revised Rules and Regulations, stating in the preface that no unnecessary restrictions have been imposed, the aim being to provide to the greatest extent for the preference of lot owners as well as to ensure stability of improvements. The board assumes the general care of the entire grounds and lot owners must be governed by the rules and regulations from time to time laid down. Monuments, vaults and markers are subject to the approval of the superintendent. decoration or memorial services may be held in the cemetery except on the days set apart for such observances, the second and third Sundays in September. The pamphlet also includes a price list covering all lots and services.

The report of the Board of Trustees of the Green-Wood Cemetery, Brooklyn, New York, for 1910, shows the following. Receipts from the sale of lots, \$146,073.96; the trust fund for the special and perpetual care of lots was increased by \$69,445.46, and now amounts to \$1,249,076.02; to the general fund for the improvement and permanent care of the cemetery there was added for the year \$123,319.48, making now a total of \$3,828,169.82. There was paid out on account of new chapel \$31,046.10. The new receiving tomb developed leakage after the roof and earth covering had been put on, and after much consideration it was determined to strip the walls and roof and cover them with waterproof concrete; this has so far been successful. A very handsome chapel is in course of construction from designs by Warren and Wetmore, architects; this will probably be finished this year. There was an average of 266 men and 35 horses employed through the year.

Continued on page XVIII



NORTHERN AVENUE, GRACELAND CEMETERY, CHICAGO, ILL, BUILT WITH TARVIACX

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The authorities in charge of Graceland Cemetery, Chicago, have been using Tarvia-X for several years for the preservation of its macadam roads and the prevention of dust For cemetery purposes, a road to be satisfactory must—

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The following letter from the Superintendent of Graceland Cemetery speaks for itself:

"Gentlemen: The roads in Graceland, surfaced with Tarvia-X last summer and also those done in 1909 are in perfect condition at the present time. They are often mistaken for asphalt, and are nearly as smooth, but are not (like asphalt) slippery in wet weather. We are much pleased with the results, and expect to keep on with Tarvia until all the streets are alike."

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(Signed) GEO. L. TILTON, Supt.

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An Index to articles on Gardening, Forestry, Park, Cemetery and Civic Improvement and kindred subjects in leading general and special magazines

Subscriptions will be received for any magazine or periodical at club rates with Park and Cemetery. Publications in which articles appear are listed below, and referred to by abbreviations, thus: S. L. 8:67.8, Feb. 03, means: Suburban Life, vol. 8, pages 67.8, February, 1909, Single copies should be ordered direct from the publications at addresses given below.

PUBLICATIONS INDEXED AND ABBREVIATIONS USED.

PUBLICATIONS INDEXED AI
American Botanist, Joliet, Iii. (A. B.),
75c year; 20c copy.
American City, The, (Am. C.), New
York, \$1.00 year; 10c copy.
American Florist, Chicago (A. F.), \$1.00
year; 5c copy.
American Homes and Gardens, New
York (A. H. G.), \$3.00 year; 25c copy.
Architectural Record, New York (Arch.
Rec.), \$3.00 year; 25c copy.
Art and Progress (A. & P.), Washington, D. C.; \$1.50 yr.; single copy 15c.
Beautiful Homes (B. H.), St. Louis,
\$1.00 year; 10c copy.
Canadian Florist, The, Peterboro, Ont.,
Can. (C. F.), \$1.00 year; 10c copy.
Canadian Municipal Journal, Montreal
(C. M. J.), \$1.00 year; 10c copy.
City Hall, The, Des Moines, Ia. (C. H.),
\$2.00 year; 20c copy.
Conservation, Washington, D. C. (Cons.),
\$1.00 year; 10c copy.
Country Life in America, New York
City (C. L. A.), \$3.00 year; single copy,
25c.
Country Gentleman, Albany, N. Y. (C.

Country Gentleman, Albany, N. Y. (C. Country Gentleman, Albany, N. Y. (C. G.), \$1.50 year; 20c copy.
Century Magazine, New York City (Cent.), \$3.00 year; 35c copy.
Survey, The, New York City (Sur.), \$2.00 year; 10c copy.
Chautauquan, The, Chautauqua, N. Y. (Chaut.), \$2.00 year; 25c copy.
Craftsman, The, New York City (Cr.), \$3.00 year; 25c copy.
Embalmers' Monthly, Chicago (E. M.), \$1.00 year; 20c copy.
Forn Builetin, Joilet, Iii. (F. B.), 75c year; 20c copy.
Florists' Exchange, New York City (F. E.), \$1.00 year; single copy, 5c.
Florists' Review, Chicago (F. R.), \$1.00 year; Leaves, Philadelphia, Pa. (For.

year; 5c copy.

Forest Leaves, Philadelphia, Pa. (For. L.), \$1.00 year; single copy, 10c.

Fruit Grower (F. G.), St. Joseph, Mo., \$1.00 a year; 10c copy.

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Attack on the Birds, Outlook, New York. 97:802-3. Apr. 15, '11.

American City of Tomorrow, F. C. Howe. Illust. Hampton's. 26:573-84. May, '11.

Birds and Arbor Day Program, Bird Lore, Harrisburg, Pa. 13:108-14. Mar., '11.

Boxes for Birds that Provide No Nesting Material, F. C. Pellett. Illust. Bird Lore, Harrisburg, Pa. 13:79-82. Mar., '11.

Coming City Planning Exhibition, W. T. Johnson. Sur. 26:183-4. Apr. 29, '11.

Great Stone Sculptures for St. Louis Cathedral. Illust. N. M. 23:361. May, '11.

Mitigating the Gridiron Street Plan, Good Effects in New York City, F. K. Winkler. Architectural Record, New York. 29:378-96. May,

Planning Small Country Places. A. H. G. 8:202-3. May, '11.

Rochester to the Fore. Illust. Sur. 26:136-8. Apr. 22, '11.

Shooting Birds with the Camera. B.

D ABBREVIATIONS USED.

City, N. J. (G. C. A.), \$1.00 year; single copy, 10c.
Garden Magazine, New York City (G. M.), \$1.00 year; single copy, 15c.
Gardening, Chicago (Gard.), \$2.00 year; single copy, 10c.
Gartenkunst, die, Frankfurt. Germany (German), G. K., \$4.00 year; 50c copy.
Good Roads Magazine, New York (G. R. M.), \$1.00 year; single copy. 10c.
Horticuiture, Boston (Hort.), \$1.00 year; single copy. 5c.

single copy 5c.
House Beautiful (H. B.), Chicago; \$3.00

House Beautiful (H. B.), Chicago; \$3.00 year; 25c copy.
House and Garden, Philadeiphia (H. G.), \$5.00 year; 50c copy.
Independent, The, New York (Ind.), \$3.00 year; 25c copy.
Landscape Architecture (L. A.), Harrisburg, Pa.; \$2.00 year; 50c copy.
Meehan's Garden Bulletin, Germantown, Philadeiphia (M. G. B.) 50c year; 5c copy.
Minnesota Hortlcuiturist, Minneapolis (M. H.), \$1.00 year; single copy. 10c.

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Minnesota Horticuiturist, Minneapolis (M. H.), \$1.00 year; single copy, 10c...

Moeller's Deutsche Gaertner-Zeitung, Erfurt, Germany, (German), M. D. G., \$3.00 year; 10c copy.

Municipal Engineering, Indianapolis, Ind. (M. E.), \$3.00 year; single copy, 25c.

Municipal Journal and Engineer, New York (M. J. E.), \$3.00 year; single copy, 25c.

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Monumental News, Chicago (M. N.), \$1.00 year; single copy, 10c.
National Nurseryman, Rochester, N. Y.
N. N. \$1.00 year: single copy, 10c. National Nurseryman, Rochester, N. Y. (N. N.), \$1.00 year; single copy, 10c.
Pacific Municipalities, San Francisco (P. M.), \$1.00 year; 10c copy.
Revue Horticole, Paris (Rev. Hort.),
French, \$4.50 year; 50c copy.
Scientific American, New York (Sci. Am.), \$3.00 year; 10c copy.
Suburban Life, New York (S. L.), \$3.00

year; 25c copy. Survey, New York (Sur.), \$2.00 year;

10c copy.
Woodland and Roadside, Boston (W. R.),
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Dale. Illust. C. L. A. 20:52. May, '11.

The Employment of Sculpture. Chas. M. Robinson. Illust. A. & P. 2:219-22. June, '11.

The Sixth Year in Civic Improvement. Mrs. Anna B. Underwood. M. H. 39:161-6. May, '11.

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What Planting About a House Can Do. S. H. Bullock. Illust. G. M. 13:307. June, '11.

Gardens and Landscape Gardening

Aquatic Gardens on a Small Scale, Herman Burgin. Illust. S. L. 12: 397-8. June, '11.

Renaissance Gardens, W. Italian Arntz. Illust. (German.) G. K. 13:83-5. May, '11.

Lattice-Work Trellis as an Architectural Feature. Illust. Cr. 20:158-62. May, '11.

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New Zoo, F. G. Ajialo. Fortnightly Review, New York. 95:726-31 Apr., '11.

Planning a Seashore Garden, M. H. Clark. Illust. A. H. G. 8:200-1. May, '11.

Use of the Pergola. H. B. 29:sup. 32. May, '11.

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Additional Data on Artificial Dust Layers. Illust. G. R. M. 12:187-8. May, '11.

Causes of Cracking in Cement Grouted Brick Pavements. G. R. M. 12:177-8. May, '11.

Gravel as a Road Material, Chas. E. Morrison. Illust. G. R. M. 12: 172-5. May, '11.

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Additions to the Grasses of Cuba, A. S. Hitchcock. Botanical Gazette, Chicago. 51:300-2. Apr., '11.

Bermuda and the Lilies, A. T. Boddington. Illust. A. F. 36:937-8. May 27, '11.

Bringing Wild Flowers Into the Garden, Elsie McFate. Illust. G. M. 13:298-9. June, '11.

Cemetery Wreaths, Illust. F. R. 28:22. May 18, '11.

Doctors for Plants, Prof. H. H. Whetzell. A. F. 36:824-5. May 13. '11.

Destroy the Weeds by Spraying, Prof. H. L. Bailey. Illust. Green's Fruit Grower, Rochester, N. Y. 31:2. May, '11.

Forest Trees Killed by Insects, C. A. Sidman. World Today, Chicago. 20:616-7. May, '11.

Factors Determining Color in Roses, M. A. Blake. A. F. 36:821-3. May 13, '11.

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Greenhouse Management, C. L. Washburn. A. F. 36:771-3. May 6, '11. Insects, M. C. Ebel. A. F. 36:825-6. May 13, '11.

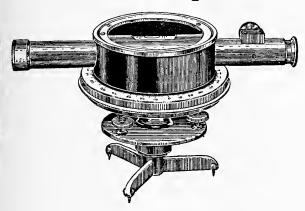
Japanese Quinces at the Arboretum, A. E. Thatcher. Hort. 13:737. May 20, '11.

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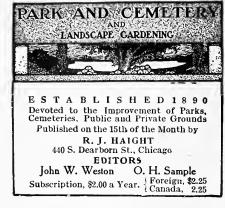
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England, W. Miller. Illust. G. M. 13:301. June, '11.

Progress in Control of Plant Disease, F. L. Stevens. Maps. Illust. Popular Science, New York. 78:469-76. May, '11.

Suggestions for Memorial Day. A. F. 36-869. May 20, '11.

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The Peony and Its Cultivation, E. J. Shaylor. F. E. 31:1090-1. May 27, '11.

The "Fun" of Collecting Anemones, W. Miller. Illust. G. M. 13:294-6. June, '11.

The Showiest Permanent Flowering Vine, Susan J. Homans. Illust. G. M. 13:300. June. '11.

G. M. 13:300. June, '11.
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G. 8:sup. 26. May, '11.

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The Science of Growing Roses, W. R. Pierson. G. C. A. 13:14-16. May, '11.

The Perennials, E. O. Orpet. A. F. 36:872-3. May 20, '11.

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Ways to Use English Ivy, P. T. Barnes. Illust. S. L. 12:398. June, '11.

Window and Porch Boxes. A. F. 36:770-1. May 6, '11.

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Two-foot section of 1½ inch suction pipe.
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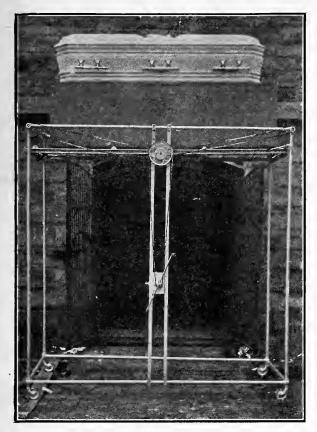
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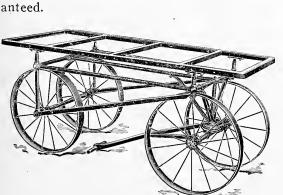
Cincinnati, Ohio

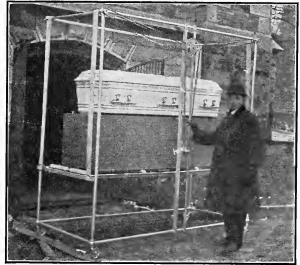
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The Department of Agriculture at Washington has recently issued Circular 175 of the Forest Service on "The Growth and Management of Douglas Fir in the Pacific Northwest," by Thornton T. Munger, an illustrated monograph of 28 pages.

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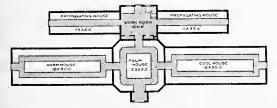
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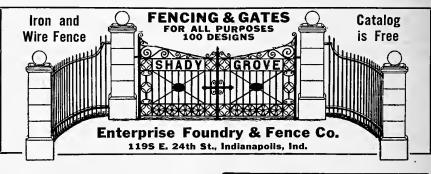
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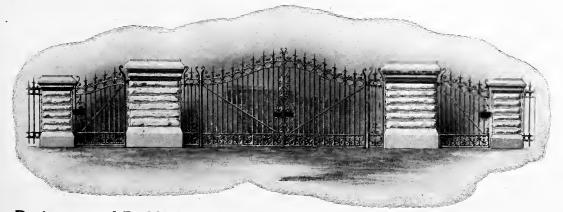
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(Concluded from page 565)

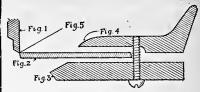
original sample, it shall show the following results, assuming also that this final 10 per cent has the same composition as the 90 per cent of the material examined: The total loss shall be not more than 35 per cent by weight; the amount of asphaltene in the original sample shall not be greater than 6 per cent by weight, and the amount of asphaltene formed by this treatment plus that in the original samples shall be at least 58 per cent by weight of the original sample. The amount of matter insoluble in carbon bisulphide as a result of this treatment shall be not greater than 5 per cent.

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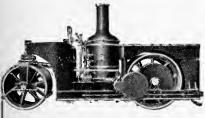
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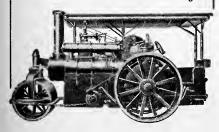
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LANDSCAPE ARCHITECTURE

(Concluded from page 570)

to design a monumental public library or city hall simply because he was a good stonemason.

Landscape architecture is then, as Charles Eliot, one of Mr. Olmsted's gifted desciples, has well said, "the art of arranging land for use and the accompanying landscape for enjoyment." Landscape gardening is, it seems to me, a term conveying in itself confused ideas, but used, if at all properly, simply to cover that part of the landscape architects's work which has to do with the development of formal or natural beauty by the simple process of removing or setting out and caring for plants. This is quite secondary to the matter of designing a general scheme for the development of land for any given purpose.

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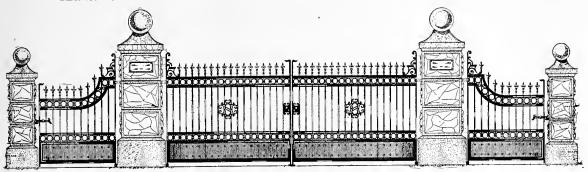
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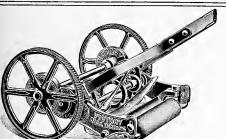
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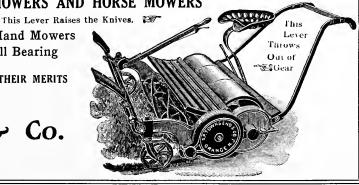
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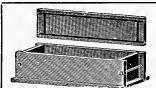
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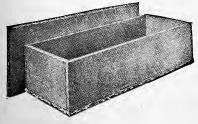


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(To be Continued.)

PERSONAL

Continued from Page 571

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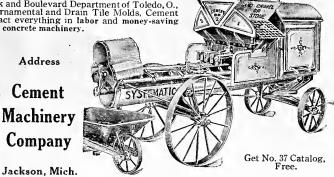
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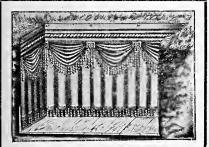


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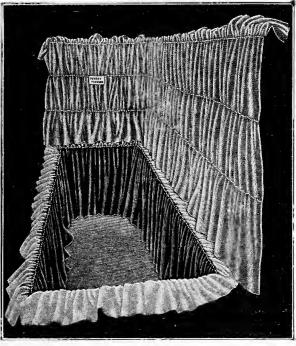
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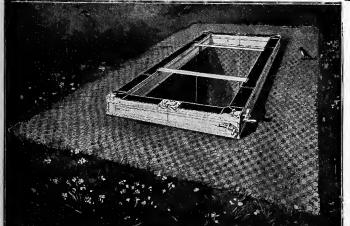
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LAKEWOOD CEMETERY

Continued from page 578

the association will receive and place in trust in the same manner as the general trust fund, such sums—in no case less than \$100.00—as lot owners may wish to devote to such special care. Such sums will be kept entirely separate from the general trust or other funds, and the interest thereof devoted to such special purpose as may be designated in the contract with the associa-tion. Estimates for the special care of lots, such as keeping the monuments and stones properly clean, and the annual planting and care of flowers, will be made by the superitendent at any time on application.

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CEMETERY REPORTS

Continued from page 581

At the twenty-fourth annual meeting of the lot owners of Green Park Cemetery, Portland, Indiana, the old board of directors was re-elected and organized as in the previous year. Most of them have served for nearly twenty years. During the past year 17 acres of ground was purchased which will be platted and added to the cemetery as needed. The Nathan estate granted permission to erect on their lot a mausoleum to cost \$4,500, and Mr. Caldwell C. Cartwright, who has served on the board of directors for 24 years, has recently purchased several lots upon which to build a memorial vault. A drainage system covering the ground now platted has been



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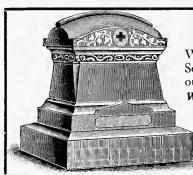
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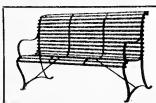
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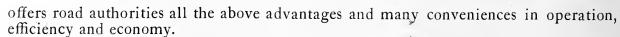
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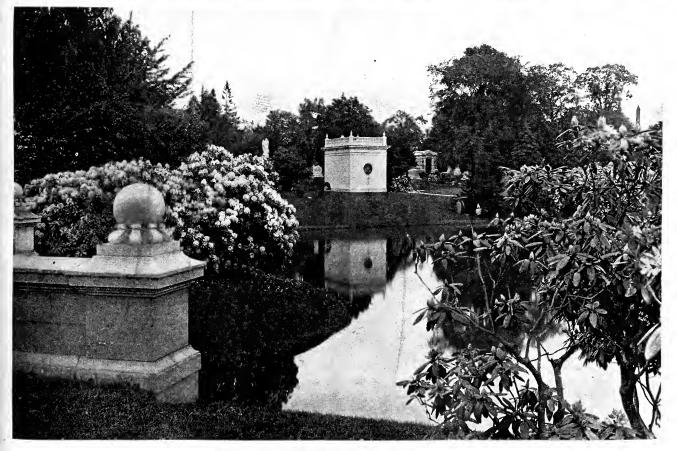
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VIEW IN WOODLAWN CEMETERY, NEW YORK; SEE PAGE 604.

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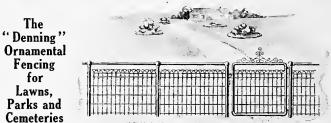
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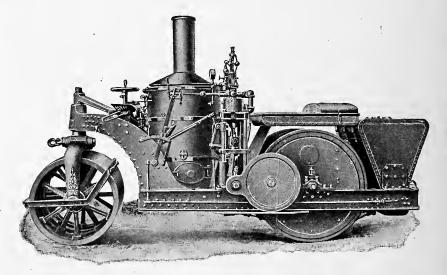
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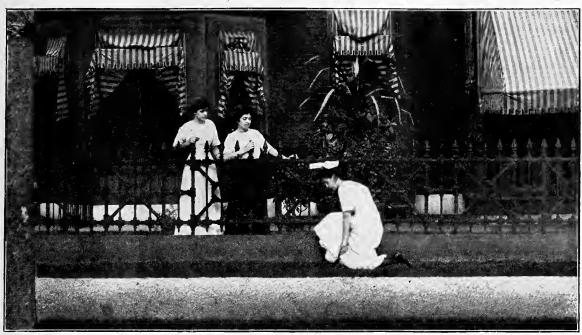
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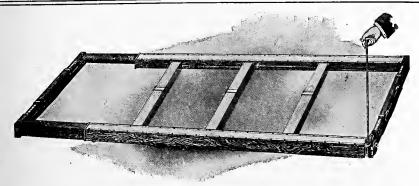
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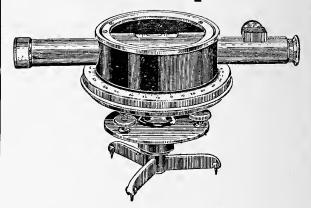
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PARK AND CEMETERY

AND LANDSCAPE GARDENING_

Vol. XXI

Chicago, July, 1911

No. 5

Organized Play

Brookline, Mass., is now testing the value of organized play on the Municipal playgrounds. This is something of an innovation in the East and the West must be credited with being first in practically demonstrating how much more effective in results is the playground systematically conducted under competent instructors. It is said that the experiment in Brookline is due to the growing belief of the people, interested in physical education, that the children and young people are not getting all the benefit which might be expected to result from the open air play parks. The Brookline Education Society is greatly interested in the experiment. In the light of experience in western cities this resolution on the part of the Brookline authorities is not much in the line of experiment after all.

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By the appointment of Prof. J. A. Ferguson, of State College, Pennsylvania, to the position of professor of Forestry in its College of Agriculture, the State of Missouri is taking a forward step in the conservation movement to take care of the natural resources of the country. The Missouri College owns some fifty thousand acres of forest lands in the southern part of the state, and it is planned to utilize these lands as an outdoor laboratory for instruction in practical forestry, and it is probable that part of the forestry instruction will be given on these forest lands. Forestry has taken hold as an attractive profession throughout the country, and the distribution of well informed and enthusiastic foresters should be the means of encouraging a better general understanding of the value of our forests from all points of view.

Good Business

An interesting episode has come to our notice. A certain park board recommended the awarding of a contract for a park building to the lowest bidder, who happened to be from outside territory. The board of aldermen objected, wishing the job to go to a local party; better judgment later prevailed and the park board's recommendation was accepted. This was the proper course and the aldermen are to be commended. It was good business, and this course should at all times be followed in the interest of the very public who elected both bodies.

& & &

A Timely Warning

"Save the trees" is a cry now frequently heard in the East and to which much attention has been paid for some years past. In the New England States the gypsy and tussock moths, and a destructive elm tree borer, have cost those states millions of dollars and appropriations have to be still annually forthcoming to keep up the fight. New York is beginning to suffer seriously, and it is quite probable that these insect pests will rapidly march westward unless the apathetic legislatures and executives awake to the fact of the actually enormous damage that one season will effect. It is only necessary to examine the records of the New England agencies which were set in motion by timely financial assistance to reach a conclusion as to the vast damage done and the prospect of

what might have resulted had there been any delay in the use of effective means of annihilation and restriction. State and municipal authorities throughout the country should watch with eagerness any news concerning these pests, and be prepared to fight them.

Cemetery Decorum

Decoration Day has again brought up the question of conduct in the cemetery, and we note many instances where the behavior of the public was by no means to its credit. However opinion may differ on the observance of Memorial Day, either individually or collectively, there can be but one standard of conduct for all participating in cemetery exercises on that day; and it is a sorrowful commentary on the effectiveness of popular eduction, if respect for the city of the dead cannot be ensured on such occasions except by legal restraint. Something is radically wrong somewhere, and it is up to our teachers and preachers to exercise their intelligence in promoting a better understanding of what Emerson called the Conduct of Life.

Missouri Supreme Court on Billboards

Every competent court decision appears to bring us nearer to a solution of the Billboard problem, and the latest dictum of the Missouri Supreme Court lends itself to such a conclusion. The decision sustains the ruling of a St. Louis Court which upheld a St. Louis ordinance which was drastic in its regulation of billboards, in fact the Supreme Court Justice suggested that the ordinance might have gone farther. The following extract from the opinion will be of interest to many: "The signboards and billboards upon which this class of advertisements is displayed are constant menaces to the public safety and welfare of the city; they endanger the public health, promote immorality, constitute hiding places for criminals and all classes of miscreants. They are also inartistic and unsightly. While advertising, as before stated, is a legitimate and honorable business, yet the evils incident to this class of advertising are more numerous and base in character than are those incident to numerous other businesses which are considered mala-in-se, and which for that reason may not only be regulated and controlled, but which may be entirely suppressed for the public good under the police power of the state. My individual opinion is that this class of advertising as now conducted is not only subject to control and regulation by the police power of the state, but that it might be entirely suppressed by statute, and that, too, without offending against either state or federal constitution."

The Arnold Arboretum Bulletins

The Bulletins of Popular Information issued weekly by the Arnold Arboretum of Harvard University are certainly an instructive addition to our horticultural literature. They appear in the form of four page folders, three pages of which are devoted to notes concerning the character, habit, growth, appearance and availability of the plants or trees under consideration, and the value of these notes lies in the fact that the objects under consideration have received the most attentive and appropriate care that science and efficiency can provide, and that both probabilities and possibilities of their usefulness and adaptation to other situations may be gathered from them. The information is authentic, reliable and interesting.



FLORA OF LINCOLN PARK, CHICAGO

The illustrated guide to Lincoln Park, Chicago, written by Former Superintendent M. H. West, and reviewed in these pages last month, gives much interesting information about the varied and interesting flora of the park.

Many of the specimens are now foreign to that locality, for the trees and shrubs which once thrived in the sand dunes no longer find conditions propitious for growth. The soil of the park having been brought in from the prairie is naturally clavey and tenacious in composition, and being enriched by the repeated cuttings of the lawns and by applied fertilizers, and being freely underdrained with the natural sand, forms a soil of no mean character. Tree life, however, is forced to combat conditions which make luxuriant growth well-nigh impossible. The prevailing winds from the southwest carry the smoke and gas from the city over the park, filling the stomata of the leaves and causing suffocation, while the winter winds from the northeast off the lake stunt the growth of plants of more tender nature. Weakened by these conditions the trees and shrubs are readily attacked by insect enemies which always thrive on diseased vegetable life, and are particularly prolific where native insectivorous birds are few. More dangerous than all these to plant life, however, are the people who throng the lawns and who are prene to trample on the tender plants and break down shrubbery. Altogether, these conditions make the work of the gardener in Lincoln Park discouraging, yet against these odds the flora of the park has been constantly increased. The forms which have been found hardy have been

placed in well chosen positions on the lawns, bringing about a landscape composition as well as a variety of bloom and beauty in arrangement.

Recently steps have been taken to establish for the benefit of the student of botany an arboretum in the region of the conservatories. Trees, shrubs and perennials already existing have been carefully labeled and new varieties are being introduced in such a way as not to mar the landscape effect.

Among the trees, perhaps the most conspicuous and useful of all is the American elm (Ulmus Americana) found native throughout the region, and which, despite the elements which conspire against it, grows to no mean dimensions. Several creditable specimens are to be found on the grounds. Another tree native to the region is the cottonwood (Populus deltoides),



THE LILY POND, LINCOLN PARK, CHICAGO.

which grows to a large size and is particularly valuable on account of its hardiness. An interesting group is to be found at the intersection of Webster avanue and Stockton drive, where and continuing in foliage until late in the fall. It is low headed and graceful in form and produces excellent lawn specimens. The red maple (Acer rubrum), and sugar maple (Acer sachagainst the city environment, and if it be spring time the honey locust perfumes the air with its clusters of pungent scented flowers. At this season, too, the crab apples are at their best,



AQUATIC PLANTING IN LINCOLN PARK, CHICAGO.

seven stems arise in a single group to a great height. A near relative—the Carolina poplar (variety Carolinensis), is a particularly useful tree in the congested part of the city where the hard woods and many of the soft woods absolutely refuse to grow. The poplar family is largely represented in the park as it is generally throughout the middle west, the Abele or white popular, the balsam poplar, and the American aspen being among the most common.

Among the willows, the white willow (Salix alba), is the most conspicuous. It grows to a large size and is thoroughly at home along the pond edges and on low ground where water is abundant in the soil. It forms an interesting shrub in the early part of its life and is used to a great extent in massed plantings. This form with the yellow willow (Salix vitellina), and the weeping willow (Salix Babylonica), make up a trio of truly valuable members of this great family.

The most useful and handsome of the maples, perhaps, is the Norway (Acer platanoides), a beautiful tree showing its leaves early in the spring charinum), are grown in limited numbers, while the box elder or ash leaved maple (Acer negundo), is a tree of more questionable value but of persistent growth.

The lindens may be seen in two forms, the European linden (Tilia Europeaa), and more common the American linden (Tilia Americana). The latter is a tree of extreme value, although falling heir to many forms of insect enemies.

The birches are not at home in the park, many of the varieties absolutely refusing to grow among the severe conditions imposed. The canoe birch (Betula papyrifera), and the white birch (Betula alba), may be found here and there feebly combating city conditions.

A tree of minor importance is the catalpa speciosa, which, although thriving remarkably well, presents a scraggy, unkept appearance.

Scattered throughout the grounds are many hackberries, alders and ailanthus trees, while now and then a sturdy, gnarled, burr oak, a relic of wild pigeon days, stands out among its neighbors mutely protesting

the exquisite double blooms of the Bechtels permeating the air with their fragrance.

Among the conifers but three species of pine seem able to successfully withstand Chicago elements. Mugho pine, an interesting mountain variety of dwarf and pendulant nature, forms a refreshing variety to the deciduous plantings, while the Scotch and Austrian pines (P. sylvestris and P. Larico Austriaca) make fair headway against the smoke, possibly on account of the arrangement of the stomata on all three sides of their triangular-shaped needles. These three forms, with the single exception of the Colorado blue spruce (Picea pungens glauca), seem to be about the only cone-bearing trees that will succeed in the park.

Earliest of all the shrubs, the forsythias with their leafless stalks of yellow, bell-like flowers, appear as harbingers of spring. The weigela in several varieties follow, accompanied by a really creditable bloom from a host of lilacs. The lilacs not only grow but thrive, even many of the more tender varieties blooming in profusion. Among the spiraea, the varieties Van Houttei, Anthony Waterer, Prunifolia, and Bumalda are most used. Sumac, honeysuckles and barberries are to be found everywhere. The viburnums, headed by the oldfashioned snowball (Viburnum opulus) form a most interesting group, while the Japan quince (Cydonia Japonica), several varieties of tamarax and a number of representatives of the prune family give height and character to many groups. The mountain ash (Pyrus Americana), half shrub and half tree, glories in park conditions and in the autumn its clusters of red berries are most attractive. A number of the dogwoods are present, notably Cornus stolonifera, C. sanguinea and C. alba forming striking masses of red in contrast with the white snow of winter. Of the barberries two forms are most common. Berberis vulgaris, our common barberry, provides a valuable plant where impregnable barriers are desired, while the little Japanese form, Berberis Thunbergii, forms dense masses of low growing shrubs which in the fall show masses of bright crimson berries. A companion piece of the latter is the matrimony vine (Lycium vulgaris), a dense growing little shrub with elongated red fruit.

In many places on the lawn groups of hardy roses are used with charming effect, those most successfully grown being Rosa setigera, R. rubiginosa, R. Carolina, R. lucida, R. multiflora and R. nitida. The Rugosas and their hybrids are especially desirable on account of their foliage, a feature usually found wanting in the rose family, while perhaps, most charming of all, forming low masses of exquisite beauty, with their dense, glossy green leaves and hosts of pink flowers, are the Wichuraianas.

On account of the rigorous climate and the quantity of lime present in

the soil of the region, most members of the Ericaceae family are unable to grow without artificial means. Sheltered by a tiny hill just east of the bear pits there is growing, however, a mass of Rhododendron maximum, with a limited number of Kalmia latifolia, the mountain laurel of the eastern hills, which never fail to strike a responsive chord in the lovers of these charming plants.

The rose garden is situated directly north of the Lincoln monument, near the Dearborn street entrance to the park, forming the southern extremity of the Mall (an elm-bordered promenade leading to the shore of the south pond). The garden forms a sunken area, the surrounding banks of which are planted out with native roses and other shrubs. In the beds the hybrid perpetuals are represented by the roses Alfred Colomb, Fisher Holmes, General Jacqueminot, Mme. Gabriel Luizet, Marshall P. Wilder, Mrs. John Laing, Paul Neyron and Ulrich Brunner, the hybrid teas by Captain Christy, Kaiserin Auguste Victoria, Carolina Testout; the Wichurianas, Rugosas and Briers are represented by several varieties.

Uninteresting, indeed, would be the park without its perennials and herbaceous borders. These denizens of the field and wood always produce a subtle charm to the observer, whether the season be spring, summer or autumn. If conditions are unpropitious in a great metropolitan park for tree and shrub growth, the lot of these tenderer forms of plant life must be doubly so. In several places in the park, however, where unusual protection can be given, herbaceous borders are maintained, prominently among these being along the western border near the conservatories, where is to be found "Grandmother's Garden," formed by a strip of open lawn, bordered on either side by massed plantings of trees and shrubs, edged with irregular beds of perennials. In the arrangement botanical sequence is omitted for landscape composition, and, although individuals are carefully labeled, the groups are placed primarily to give harmony of color and form. Altogether, over four hundred and fifty species are represented, forming a continuous bloom from early spring to late fall. Here is to be found, first of all in the spring, the dainty purple blooms of the scilla, which never fail to give joy to park devotees. Many of the economic plants intermingle with forms not uncommonly known in various parts of the country as weeds, and which, strange to say, often furnish the most beautiful of flowers. Here are the gentians and the foxgloves, the rose mallows and the lilies, the primroses and the bell flowers. The anemone and the trillium give way to the delphinium and althea and the violets and the pansies nestle modestly among the irises and spireas. The country boy here again finds, to his delight, the mint, the mullein and the milkweed and perhaps for the first time sees that there is beauty even in the thistle. The place is a text book for the student, a joy to the horticulturist, a trysting place for the lover, and altogether a place delightful.

Three small ponds near the conservatories are used for the propagation of aquatics and shore plants. Two of these, situated on the eastern border of the parterre, are planted out with a collection of native and exotic Nymphaeas and Nelumbiums, together with the gigantic Victoria Regia and V. Trickerii. Along the shores dense masses of water hyacinth are kept in subjection only by the use of barriers. Cat tails, pickerel weed and lilies in variety thrive along the shaded water edge under the lee of the miniature hills.

VALUE OF ATHLETICS IN THE PLAYGROUNDS

From an address before the American Association of Park Superintendents, by George W. Ehler

We find now a growing sentiment that it is the business of the state to make the living conditions of the individual as tolerable as possible. It has been the tendency of the law to make the working conditions of the individual better and now we need to make the city a good place to live in as well as work in. We are beginning to get down to the causes of things and endeavor to change the

situation in our cities and towns and do away with those conditions which tend to make impossible the living of the life which we come to believe in, as necessary to happiness and efficiency, the possibility of fresh air and outdoor life and reasonable rest and recreation.

This has a meaning to the man who has interest in the outdoor life, the park, playground and bath. In our

cities to-day it is impossible to have anything at all appropriate or adequate for the great mass of the people. This thing has taken a tremendous grip upon the people. The newspapers of Baltimore recently have been having discussions about the fact that many houses are vacant and people not looking for them, and saying that it is because conditions in the suburbs have so attracted the

people from the city that they have gone out there, and blaming the landlords and saying they must improve their houses in order that the people may be led to come back to the city. Isn't it most significent and a desirable thing that the people should be leaving the houses of the city, fourteenteen foot working and living cells, a place where nobody can go outdoors unless on the front steps, and isn't it desirable to part with that condition? You people who come from the west don't know and cannot appreciate what the conditions really are in our eastern cities here, where the small lot obtains, twelve, fourteen or sixteen feet front, on that a house and block after block of them, and where they go out in the suburbs and cover them with brick and mortar, and where they say, we must fix up our houses so the people will come back from the country to the city. And yet the great cry is "back to the farm," and out into the sunlight.

This modern idea that normal living conditions are absolutely necessary for the individual to be a healthy and efficient individual, and therefore an efficient member of the state, and that only through that will we get a state of society up to date, and able to meet the conditions of today, is responsible for tremendous changes that are going to take place in the future. It is responsible for this demand that children shall not have to play upon the streets but have reasonable places to play away from the dirt and dangers of the street. The fact that we are discovering that by this thing we are reducing criminality and juvenile delinquency has created in the minds of the people an interest in these things and showing a value in them that is going in a short while to overtop the interest we have at present in business and streets and alleys and that sort of thing.

You people are in control of parks, all the outdoors that is available to the cities. This means that instead of the people thinking of their outdoors as pretty places to go and look at, and admire the trees and listen to the birds and rest, that it is going to be a thing they want to use. It is going to mean tremendous increase in the numbers of people in it, an increase in upkeep expenses. Our park boards are realizing the fact that when you permit a thousand children to play, that you are going to have a difficulty in raising flowers and grass and properly conserving them,

and also let these two legged flowers grow up in the way that they ought to; but then we are getting to believe that flowers of the two-legged species are more valuable than those that we spent so much money on in the past. We are going to provide for both in their proper places and relationship. Now I think we can do for both in the same place. There have been some demonstrations of that in some of our cities. The meaning is that the out-doors is going to be used. It means that you gentlemen will have to look at your parks from now on, not as gardens to be admired but open places for the uses of the people to do the things they do outdoors and plan them with respect to certain places being provided that in an adequate way can be made use of by the boys and girls and men and women, young and old for the leisure time activities that have such a tremendous relationship to morals as well as to simple pleasure, and rest and recreation from ordinary daily labor.

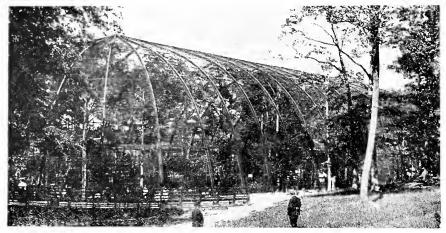
So much, simply to bring to you what is, we believe, the point of view with respect to the outdoor spaces wc have now. They are the now available places for the people to make use of in this outdoor life that it is going to be harder and harder to provide for. It is going to press hard. You may say, they must go away out; we must have this for the people to look at it. But this is poor theory, for primarily nothing is too good for the boys and girls and young men and women in your own town. The thing too good for them is too good for somebody from outside. They make your city and are going to make it more and more in the future, and we are going to make it better for them. Take the social view that this is a great social instrument, an instrument that has value, value from the standpoint of health, physical, mental and moral health, and is going to have a meaning in relation to these things in the future as never in the past.

We consider athletics the play of children beyond eight, nine or ten years of age. The little child up to six years of age plays in a distracted sort of way, doing things nobody can see any value in; but if you prevent him doing it he grows up wholly undeveloped. If he does not have the opportunity to pick up things and throw them down again and again he is not going to get the use of his hands. The push and pulls

are all absolutely necessary for the development of the muscles and nervous system so that he may become a sensible feeling being. This is a thing that has a tremendous significance and indication with reference. to morals, with reference to the law of obedience. It is there the boy learns what it means to be square. The first law that the boy knows, that he willingly obeys and follows, is the law of the game that he and his fellows engage in, and there he first learns that law is for some good purpose and that obeying the law not only saves him every benefit but he learns that he gets something out of it in the way of pleasure or enjoyment that he never got from obedience to the law imposed through people. In our various experiences we have found that where proper provision has been made the morals improve. The reports from Chicago, where provision for this sort of thing has been done on the greatest scale, show that definitely, and for this rea son our athletics, which are the predominating form of activity of the boy from nine or ten up to adult life, are the greatest leisure time regulators of his morals that we have; and for that reason there is as much reason why the state, through its various forms, should provide for it as they have for the formal education of the individual through public schools.

In the city of Baltimore we have a Public Athletic League that through co-operation with the Board of Education, the park commissioners and the interests that Superintendent Manning and others in connection with him have taken, have enabled us to give to the boys of Baltimore an opportunity. By athletics we do not mean only track and field events but the whole range of competitive sport. Track and field events are individualistic and are not the dominant interest of boys over twelve or fourtcen. Instead of the track and field athletics we have come to see that the greatest value lies in group games, games in which the largest number can participate with a minimum of space. Baseball calls for a large amount of space, but the playground people have solved that problem and we have now a game that approximates it absoutely in interest, exercise and benefits. With play ground ball we can put four games on the same amount of space taken for the baseball diamond and use four times as many people without danger to any of them.

A REMARKABLE PARK BIRD EXHIBIT



EXTERIOR VIEW OF HUGE BIRD CAGE Forest Park, St. Louis.

The St. Louis park department is gradually stocking up the great bird cage left by the federal government when its world's fair bird exhibit was removed after the fair. The city acquired the cage from the government and the Louisiana Purchase Exposition Company and has maintained it as one of the features of the zoo in Forest Park. There are now about 67 different varieties of rare birds in the cage, the total number being about 300.

That sounds like a lot of birds for one cage, and it will sound even bigger when it is said that nearly all of the birds are big ones, stork, grouse, cranes and other bigger and rarer birds. But the cage is equal to its task, being 250 feet long by 100 feet wide and 75 feet high. It is a reproduction of the big cage maintained by the federal government at

Washington, though 50 feet shorter. The Washington cage was modeled after the great Vienna cage. The cage is so big that trees grow inside of it.

A few months ago the Million Population Club of St. Louis took up a movement for a big zoo in Forest Park, to be maintained by the city. At the present time the zoo is not extensive, though the collection of animals includes a herd of deer, of elk and of buffalo, several bears and a dozen lesser animals. The boosters of a bigger zoo want a big building in the park and an appropriation sufficient to maintain it and buy animals. A number of animals have been presented since the movement started, and the collection is growing, but city officials now are unwilling to set aside additional funds for that pur-

tained by the federal government at pose.

VIEW IN THE CORRIDOR OF ST. LOUIS BIRD CAGE.

Only a shelter is provided for the grazing animals, with fenced off reservations in the big park, but a building of masonry and bars has been erected for bears. The bird cage is the most interesting of any of the buildings.

It is built entirely of steel and one-half inch wire mesh. The foundation, steps, basement, etc., are of concrete. The cost was about \$10,000. Inside the cage on each side of the big dividing corridor, is a row of lakes, fed at the higher end from city water mains and draining through to a sewer at the lower end.

The storage room and big basement where heat is provided by a furnace



IN THE AQUATIC SECTION. St. Louis Park Bird Cage.

for the tropical birds, is at the west end of the cage and extends around the circular end, fifteen to twenty feet wide and about 100 feet long. Some of the tropical birds, including the stork, had to be confined in coops in the basement all winter, for they would have frozen if allowed to go out with the other birds. Several other varieties had to have a little heat, but did not need as much as the stork and were allowed to occupy one end of the basement which was only partly heated.

A caretaker is maintained at the cage all the year around, who feeds and takes care of the birds. Feed is

purchased through the supply commissioner.

The present zoo and bird cage attract large crowds to the park, particularly in summer time and on Sundays and holidays. As high as 10,000 people have viewed the birds on nice days when there was no other special attraction to bring people to the park. Hardly a Sunday passes that two or three thousand do not include the cage in their sight-seeing in the park.

The public schools make special use of the cage in the teaching of classes in zoological subjects. Five and six classes are often at the cage at a time, each in charge of a teacher.

Children are often brought from the surrounding towns by the school authorities, and the number of visitors during the school year is greatly increased in that way.

Advocates of a bigger and better public zoo point to the interest manifested in the New York zoo and that in some other cities as an indication that it would bring many people to the city. Some of the railroads now run regular excursion trains to St. Louis during the summer months, and it is claimed that if there was a point of interest like a great zoo more roads would run excursions and those who

do run them would do so oftener and be patronized more.

Park Commissioner Philip C. Scanlan favors the bigger zoo and new quarters for the present zoo, but says his appropriation is not sufficient. With other officials, however, he says that money may be available for it later. The enthusiasm among some of the business men and the Million Club's special committee seems so great that a fund may be provided for erecting and equipping the zoo and turning it over to the city. In that event the city would have only the expense of maintaining the zoo, rather a heavy one.

EFFECTIVE PARK ORGANIZATION and MANAGEMENT

From a Report to the Chattanooga Park Board by John Nolen, Landscape Architect, Cambridge, Mass.

With regard to the composition of the park board or commission, the best results have been secured usually from a body composed of not less than three nor more than five members, serving without pay, and with overlapping and rather long terms of service. The president of the board should be a distinctly able administrator, accustomed to large affairs and resourceful. He should have some measure of constructive imagination, high ideals, and sympathy with the people. Moreover, it is of great advantage if he has had some of the fruits of travel, acquainting him at first hand with the parks and public improvements of other cities.

The other members of the board should be men of good taste, men capable of judging accurately what is appropriate in the form of development for this or that park. They should possess a nice discrimination as to the best means to employ to produce consistent effects. It is not yet customary to appoint women on park boards, but many of them possess the qualifications that are most desirable. They have often a love of nature, a knowledge of art and familiarity with the purpose of parks, especially the relation of parks and playgrounds to children, which men do not possess to the same degree.

The board of park commissioners should confine itself to questions of general policy. It should not attempt to make plans or designs for park grounds, to administer park laws and regulations, nor to supervise park maintenance. Advice as to the selection of land for parks, plans for their laying out and construction, and occasional suggestions as to their up-

keep should be secured from well-qualified landscape architects, experts, who have gathered up the best results of study and experience in this difficult field of art. There is danger of serious mistakes, if dependence is placed upon men who as engineers or gardeners know only a part of the work, for the final and highest justification of parks is their beauty; and, if they lack appropriate, permanent, and ever-increasing beauty, they fail.

The execution of the plans of the professional landscape architect, the selection of park employes, and the detailed administration of the park work should be intrusted to a trained superintendent. While his qualifications are different from those of the landscape architect, they are of a high order, and the success or failure of the parks as works of landscape art and their right use by the people will depend largely upon the superintendent. Landscape art is different from any other, except the art of city making which includes it, in that it is an art which deals with growing things. It is not fixed like a painting, a statue, or a building. From year to year it changes, takes on new forms and proportions. Therefore, if suitable and artistic results are to be secured, this process must be steadily and intelligently controlled and guided. Such work requires a man of taste as well as knowledge, and there is to-day in this field an increasing demand for superintendents of high qualifications.

If a park board is to proceed economically and confidently in the execution of large plans for park development, it must be independent of financial or other control by the city

government. Otherwise, a vacillating policy must be expected, inferior results, and considerable waste of public funds. Independence in the matter of the annual appropriation is especially important. There should be a law giving the park board a fixed percentage, based upon the assessed valuation of the city. This automatic method is sound, because the regular park work increases in proportion to the population and wealth. Unusual needs should be provided for by additional appropriations by the city government, in excess of the regular appropriation. As clear a line as possible should be drawn between maintenance, on the one hand, and acquisition of land and permanent construction on the other. Maintenance expense should be met from current funds, but the cost of acquisition and permanent construction should usually be provided by long-time loans. The most indestructible and permanently valuable asset of the city is the land it owns, and its acquisition should almost invariably be provided for by loans. One exception to this rule is when the method of payment followed is that of special assessment on abutting or near-by property. Kansas City adopted this method fifteen years ago, and under it successfully developed its entire park system, providing for an expenditure of over ten million dollars without bonds.

In park administration, then, the points of greatest importance to keep in mind are the composition of the park commission, the adoption of a sound general policy, the liberal use of expert designers, the employment of a highly qualified superintendent, and entire freedom from politics.



W. H. Manning, landscape architect of Boston, Mass., has been looking over Grand Rapids, Wis., preparatory to making plans for a park system.

Ross, Cal., has voted to bond the town in the sum of \$3,000 for park purposes.

Corlears Hook Park, New York, is to be improved and enlarged at a cost of some \$25,000.

Nothing could be more definite as to a city's desire in reference to its parks than the decided vote of Fall River, Mass., ratifying the act of the legislature authorizing cities to appoint commissions to lay out public parks. The vote stood 6,563 to 1,519.

The Wisconsin senate recently adopted a substitute for the Johnson bill naming the new state park in Door county Peninsula Park, instead of Stephenson Park, which was presented by Senator Bosshard. It also provided that the \$25,000 donated by Senator Stephenson for the purchase of the land be returned to him.

The eastern branch of the Association of Park Superintendents held a meeting and had a day out, as guests of G. X. Amryhn, superintendent of parks, at New Haven, Conn., on June 10. A picnic dinner was served at East Rock, and a tour of the parks and a climb up East Rock contributed to the pleasures. The grounds of the Elm City Nursery Co. were also visited. Mr. Christopher Clark, now 84 years of age, so well known for his splendid efforts to improve Northampton, Mass., invited the association to hold its next meeting at Northampton in September, which was unanimously accepted.

The city council of Champaign, Ill., has gone on record as favoring the organization of a park district.

The Capitol Park extension bill, to enlarge the capitol grounds at Harrisburg, Pa., has been signed by the governor with a proviso. The appropriation is \$2,000,000.

The bill carrying \$10,000 annually for five years to the state park board was passed by the Wisconsin legislature. This is in addition to the lump appropriation of \$50,000 already given the board for purchase of park lands.

If the philanthropic plans of Nelse Hansen, at Grayling, Mich., the local millionaire lumberman, carry he will present to the state some 7,000 acres of the wildest and most beautiful natural park land in the middle west and Michigan will have its own Yellowstone Park. This land is located in Crawford county near the above town, and is one of the few remaining well timbered tracts of such size. It abounds in wild game and is an ideal spot for a park such as Mr. Hansen would like to give to Michigan.

By the will of Mrs. Mehitibile C. C. Wilson of Cambridge, Mass., \$10,000 is bequeathed to the city of Boston, to be used to build a drinking fountain for men and animals at the corner of Columbia road and Washington street, Dorchester. She also leaves \$5,000 for the care of the fountain, beautifying the parks and buying books for the public library.

Saratoga Springs, N. Y., recently paid Richard Canfield \$150,150 for his park and casino for city park purposes.

The heirs of the late Edward C. Hegeler, the millionaire zinc manufacturer and old-time resident of La Salle, Ill., have donated a fourteen-acre plot to the city for park purposes, with the reservation that five acres of it is to be given to the La Salle-Peru township high school, to be used by them in their agricultural experiment work.

The purchase of two more small park sites has been recommended by the Small Park Commission of Buffalo, N. Y., to cost about \$112,000.

The proprietors of the Elm City Nursery, New Haven, Conn., a member of which, Mr. Ernest F. Coe, has recently spent some time in the Flowery Kingdom, have issued invitations to view an interesting and comprehensive collection of Japanese dwarf trees, and other typically Japanese plants which have just arrived. There are also a number of splendid examples of Japanese stone lanterns in the collection.

By the will of Dr. Charles G. Weld, of Boston and Brookline, Mass., his estates in these two places are donated to them respectively for the purpose of public parks.

Mr. C. M. Loring, well known in connection with the Minneapolis Park system, and whose love for trees is always practically expressing itself, has come to the front in another effort to encourage the planting of street trees by the neighborhood associations in that city. He has offered to place to the credit of the Joint Improvement Association the sum of \$500, to be distributed in prizes for the best uniformly planted street, when not less than five streets of not less than five blocks shall have been entered for competition. The trees to be either elm, hackberry, linden or maple, one variety to a street, and planted in accordance with the Park Board regulation. This is an example worthy of emulation and extension.

Quincy, Ill., has a park area of 225 acres with a population of 167 to each acre of park. It has a boulevard and park association organized under a special charter, and it is under this association that its fine park system has been secured and developed. The association's methods provide a study in park work well worth particular investigation.

Some 200,000 new bulbs are annually purchased and planted in large and long beds of solid colors in Schenley Park, Pittsburg, Pa., and make remarkably showy and attractive displays. After blooming all the bulbs are dug and matured, and the following fall these are planted again under the shrubbery and in the grass of the long stretches of lawn. There is no doubt as to the beauty of the new bulbs, but as has been observed elsewhere the most artistic effects are seen in the grass plats and shrubbery patches where the old bulbs were replanted.

NEW PARKS

A public park has been opened in Windsor Locks, Ct., largely through the efforts of the women. The children's amusement and exercise have not been forgotten.

The citizens of Winchester, Mass., have voted to raise \$90,000 to purchase the Whitney mill property, at the junction of Main street and Mystic Valley parkway. When improved this section of Winchester will be one of the most beautiful spots in the Metropolitan Park district.

Starved Rock on the Illinois river, a historic spot around which cluster memories of Pere Marquette, La Salle, Joliet and others of the early explorers and missionaries, is to be established as a state park. The bill appropriating \$150,000 for the purchase of the land has been signed by the governor.

The voters of The Dalles, Ore., have decided to set aside 40 acres belonging to the city for a public park. It is an ideal spot lying immediately south of

the city on an eminence overlooking the surrounding country. This is a result of the efforts of the Sorosis, the woman's club.

Grand Rapids, Mich., will acquire for park purposes the bluffs extending from the reservoir to Coldbrook, making one of the finest park sites the city could possibly secure.

Wilmington, Del., is to expend a further \$29,000 for the purchase of four plots of ground for small park purposes.

The late Mrs. Mary Eaton Aborn has bequeathed to Wakefield, Mass., nine acres of land in Saugus, near the Wakefield line, on which is located Castle hill, or Castle rock. It is "to be devoted forever as a place to be kept open for the benefit of the people of Wakefield and the public generally."

Some 5,000 acres of land, located on the shore of beautiful Lake Coeur d'Alene, passed into the hands of the state of Idaho recently. The state land board has paid to the department of the interior \$11,379.17, the purchase and appraised price of the land. Title to the park was held by the government owing to the fact that the park was within the boundaries of the Coeur d'Alene national forest. Heyburn park, named in honor of its senior senator, becomes the first big public state playground of Idaho.

Mrs. Rebecca Williams, widow of the late Capt. John B. Williams, has donated to Bellefontaine, O., a fine 20-acre tract of land, at present covered with virgin forest, for park purposes.

Riverside park, a pleasure ground of much natural beauty, bounded on one side by the Missoula river and on the other by the lake above the big power plant near Bonner, where the Big Blackfoot river joins the first mentioned stream, has been opened to the public of Missoula, Montana.

The Wisconsin senate recently passed the bill appropriating \$25,000 for a memorial park and decorative arch at Camp Randall, Madison.

The city council of Okmulgee, Okla., has accepted a block of ground in an addition to Okmulgee, to be used for park purposes. The council agrees to plant trees, put in a sidewalk and build a pergola.

John Milham park, a tract of 66 acres, the gift of former mayor Frank H. Milham, was formally turned over to the city of Kalamazoo, Mich., a short time since. It was named in honor of the father of the donor.

Two new park tracts totalling about 300 acres were recently acquired by the Cincinnati park authorities. One of 170

acres is located in Cumminsville and the other in Westwood.

Final plans are in progress by John C. Olmsted, landscape architect, for the improvement of the park features of Riverside, Calif.

PARK IMPROVEMENTS

Melgaard park, Aberdeen, S. Dak., named after a pioneer, a part of whose tree claim forms a part of it, is being laid out and planted. A lake is also under construction.

The Village Improvement Society of Seneca Falls, N. Y., has engaged a landscape gardener to arrange some planting in the park, while considerable work of the kind has been done in Restvale cemetery by the same organization.

Riverfront park, Joliet, Ill., has been officially opened. It is situated on the bank of the river which, with its fringe of trees and foliage that nearly touches the water which rushes by the bank, is a refreshing sight.

Tennis courts and other features of outdoor exercise and amusement are being added to the parks of Brainerd, Minn.

Immediate action has been voted on the long delayed plan for the \$5,000,000 parkway on both sides of the Bronx River, New York City, from the Zoological Park to Mount Kensico in Westchester county, a distance of 13 miles. This improvement was sanctioned by the legislature in 1907 and the commissioners appointed, whose terms, however, have expired by limitation. President Miller has promised to make a favorable report to the board asking for the initial \$75,000 necessary to begin the work.

A wading pool is one of the improvements to be added to Prospect Park, Holyoke, Mass. This has been found necessary for the accommodation of a large percentage of children in its neighborhood. The grade of the low parts of Prospect Park is to be raised, as at times the sidewalks are practically under water.

Central and Oaklawn Parks, South Pasadena, Calif., are undergoing considerable cleaning up and improvement.

Elaborate plans for the beautification of Elizabeth Baldwin Park at Houston, Texas, have been made by members of the Allen school Mothers' club. If the members are successful in their campaign for funds the park will be made an attractive spot. The park site is a beautiful natural grove that was purchased by a provision in the will of the late Mrs. William Rice, wife of the well known philanthropist.

It was the sense of a recent meeting of Park Commissioners of Westfield, Conn., that to bond the city in \$10,000 for park purposes would prove to be more economical in the long run than yearly appropriations for improvements.

Extensive improvements are being carried out in Lake View and Fairmount Parks this season. Another lake is being added to the latter park, and many details already in existence repaired and improved.

Work on the new park and playground at the old Capitol site, Austin, Texas, is progressing satisfactorily. The ground has been graded and walks are being constructed. A fountain is being built in the center of the park, and four diagonal walks lead up to a wide promenade near the fountain.

Wm. B. Cook, landscape architect of Los Angeles, a member of the firm which has charge of the Exposition Park at that place, has recently been looking over Redlands, Calif., for the park commissioners, with a view to improvements.

As soon as possible after the title is passed work will begin on the converting of the old Totowa avenue cemetery of the Second Reformed church, Paterson, N. J., into a public park. The site is an excellent one.

PARK REPORTS

The Report and General Plan for a Park System for Chattanooga, transmitted to the Board of Park Commissioners of that city by John Nolen, landscape architect, of Boston, suggests to the board the advisability of prompt action on financial grounds, and claims for the city an opportunity for creating a comprehensive and beautiful system seldom equalled. Existing park features are discussed together with desirable changes and additions and a map and a number of fine half tone pictures greatly add to the interest of Mr. Nolen's valuable contribution to practical park literature.

The report of the Board of Public Works and that of the Water Commissioners of the city of Little Falls, N. Y., for 1910, is quite largely statistical, and gives detailed accounts of receipts and expenditures in the respective departments. The city has ten parks and breathing spots, ranging from 30 acres to one-quarter acre, nine of which, including the large park, being gifts from public-spirited citizens. The city cemetery contains 12 acres. The lots in the cemetery were assessed \$2 per lot for maintenance for 1910. Little Falls has a population of 12,500, and the city covers some 2,591.22 acres.



HISTORY and GROWTH of LANDSCAPE ARCHITECTURE

A Definition and a Brief Resume of Its Past and Present; Presented Before the Congress of Technology, by Stephen Child, Landscape Architect and Consulting Engineer, of Boston

II.—Early Italian and Mediaeval Landscape Architecture



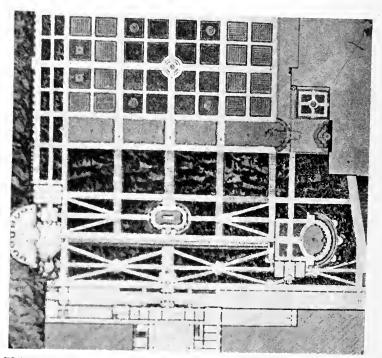
VIEW IN THE VILLA D'ESTE, ITALY

In ancient Egypt even, the arrangement of the grounds about the royal palaces and their important buildings, while they were distinctly temporary in their character and have long since been destroyed, are well preserved in wall decorations and other drawings, showing many evidences of thoughtfulness in design. These show a distinct effort to conform to the existing condition of flat topography, fertile soil, ample space, and hot, dry climate. Provision is made for irrigation, for desirable protecting walls, and there are many evidences of the fact that while the economic motive may have been to a certain extent present, the primary one was agreeableness and pleasure. There is ample provision for shade and for flowers, many of which were used in the religious ceremonies of those times. There were decorative pavilions, painted walls, sculptured ornaments, all planned for pleasing effects and with careful thought as to scale and proportion. There was no particular

attempt at symmetry as a whole, but in the smaller structure and portions of the grounds symmetry is recognized. Repetition is effectively used and a certain degree of unity is clearly noted in many of the drawings.

What has come down to us in the records of Mesapotamia show similar thought and study, and here as well as in Persia we know not only about the famous so-called hanging gardens of Babylon, but of great enclosed hunting parks arranged with a more or less orderly system of avenues and paths through them.

Homer's famous description of the grounds of the Palace of Alcinous show how beautiful these must have been and how carefully the Greeks studied and thought out all such problems. No people before or since were ever more thoughtful of matters of design in the arrangement of their grounds and the placing of



PLAN OF VILLA D'ESTE IN ITALY.

their statuary and buildings to fit the slightest bit of unusualness of topography. All this is very different from gardening, and here as in Egypt we note the application of true principles of design.

The Roman conquerors took these thoughtful designers of the best landscape art of the Greeks, together with their other artists, to Rome, and as a result Roman estates and villas reflect this fine Greek influence. The greater wealth available and the changed physical conditions brought forth from the fertile brains of these designers new forms of landscape art evidenced by the ruins of the great Roman and Pompeiian estates and gardens that have come down to us. Here are shown not only the ideas of Egypt and Greece modified to meet new conditions, but careful consideration of the questions of distant view and vistas. It is clear that these men planned to have informality at a distance from their mansions and palaces with a more evident approach to formality as one nears the very formal designed palaces and terraces. There was a thorough appreciation of the need of conformity to the same architectural style throughoutin a word, unity. This is again cor-



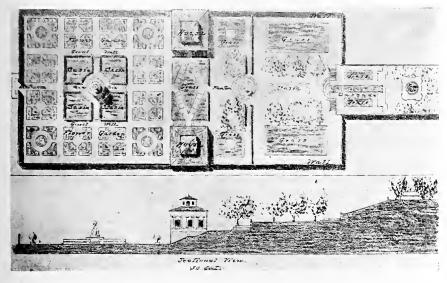
VIEW IN VILLA LANTI, ITALY.

as open public grounds laid out with rare skill and dedicated later to the use of the people. Fitness, definiteness of purpose, a careful consideration of the question of scale as well as beauty and art and unity were all studied, and as a result we can today to our very great advantage study these designs in connection with our are struggling with this part of the problem in our own city planning.

Then came the setback of the socalled dark ages, but the flame thus lighted was never completely extinguished and finally burst forth again in the Renaissance more gloriously than ever. Even in the mediaeval times we find evidence of an effort at design in gardens and grounds. There was indeed more or less similarity to the work of the Greeks in this respect.

Mediaeval designers were, however, influenced by limited financial and other resources and by lack of labor and space. There is a marked absence of symmetry in their designs as a whole. It appears, if at all, only in minor details. They show none of that recognition of axis or of balance about an axis, such a notable feature of Roman and Italian designs. They met their own peculiar conditions well, however, and fitness may be said to have been their controlling motive.

These were warlike times and security was looked for first, with pleasure and beauty as later considerations. The gardens and grounds of the old monasteries and feudal castles were essentially places of leisure and contemplation, and the high embattled walls lent an element of austerity to such grounds. All these conditions made simplicity, fitness and a complete utilization of every part important. Castles were built on hill tops for their better defense, and areas were therefore limited and very irregular in outline, but this irregular space was completely utilized. Everything was



PLAN OF VILLA LANTI, ITALY.

rect design and what we are seeking for today.

We find also among the Romans some of the best and very earliest carefully designed city squares and public works. These in some cases were first designed for the private grounds of the emperor and others, but later given to the people partly to gain popularity. In the preparation for them houses were removed and the resultant space treated

own efforts at planning for public parks and squares.

The habit of setting aside such areas for the recreation of the people grew apace, and the question of their distribution throughout the city was studied with care, and as a result Rome was very well supplied and the parks were particularly well distributed. Under the empire the park areas of Rome were one-eighth of the total area of the city. We today

compact, neat and orderly. These were noticeable features of English design, as we shall see, but the conditions of mediaeval times did not lend themselves to a high development of landscape design.

With the cessation of these harsh warlike conditions and the dawn of

the Renaissance, landscape design entered upon a new and glorious era, for now, especially in Italy, great protective fortress walls were useless, and we begin to find country places designed solely for enjoyment and the entertainment of guests, not as retreats for protection from warlike neighbors. Then was developed that perfect thing in landscape design, the Italian villa.

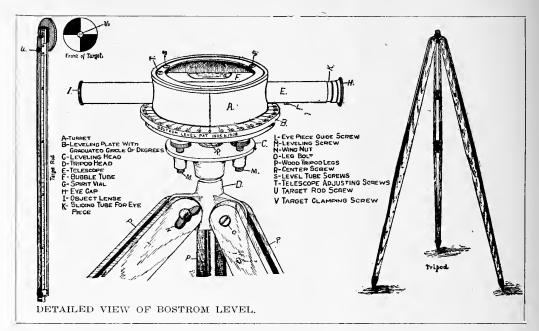
The greatest artists, such as Leonardo da Vinci, Raphael and many others, made plans for them, and as we study their work in this regard we see that

the best principles of landscape design were instinctively used. An Italian villa included the entire creation of roofed and unroofed buildings, terraces, fountains, paths, walls, seats and planting. Everything was most carefully provided for with one well rounded purpose in view.

The site was selected in an agreeable country, giving access to good breezes and rare views; accessibility and constructive considerations were remembered. It was a hilly country and rather high up, but not at the top of these hills were placed the villas. There was always the closest adjustment to topography, but this adjustment differed from that of mediaeval times. These sloping situations led naturally to the development of the terrace, and while the Renaissance designers may have modified the topography more, they did not contradict it, as was done in the earlier Roman times. Definiteness was retained by a larger unity, was introduced dependent more or less upon symmetry. Symmetry was almost lacking in mediaeval times, but in the later Renaissance was carried to extremes. Repetition was most effectively employed. Shade and an abundant water supply were always provided. Social conditions were ever in mind, in fact, the purpose of the Italian villa was largely social. These were not hunting lodges, ascetic retreats, but places for the social enjoyment of wealthy princes and prelates and their many friends. Here we may not mention the many details thought of, but the Villas Lanti and d'Este, to mention only two of the more famous, show how perfectly all was considered.

(To be-continued)

BOSTROM'S IMPROVED LEVEL



The value to our readers of detailed knowledge of improved equipment they require, is unquestioned. We are therefore glad to show this drawing of the Bostrom Improved Levels for Park and Cemetery Superintendents, and Landscape Gardeners. This detailed illustration of one of these \$25.00 outfits illustrates the principal working parts of the instrument in such a manner as to emphasize its simplicity of construction and ease of operation.

For the Park and Cemetery Super-

intendent, or Landscape Gardenér, large or small, the Bostrom Level has elements which meet the requirements to a greater degree than any other Level within our knowledge, at a considerable advance over the Bostrom price.

The announcement of the manufacturers in this issue sets forth details and terms which should be investigated by all of our readers who need or may need a thoroughly dependable surveyor's Level at moderate cost.

ASKED and ANSWERED

An exchange of experience on practical matters by our readers. You are invited to contribute questions and answers to this department.

How can I get black plantain or buckthorn out of my lawns?

When would you trim hydrangeas, spring of year or fall?

How much lawn grass seed will I sow on a lot 15 feet by 20 feet, equaling 300 sq. ft.? H. H., Pa.

In answer to your correspondent as to how to get rid of black plantain, will state that this is sometimes a difficult matter. Some superintendents have had success by using Ammoniated Lime, but this will have to be applied when the weather is hot and when there is no likelihood of rain for at least 24 hours.

As to a second inquiry as to the proper time to trim Hydrangeas, will say it is in the spring of the year. The proper rule to follow is that all fall flowering shrubs should be trimmed in the spring and all spring flowering shrubs should be trimmed in the fall.

Third inquiry as to how much grass
(Continued on page VIII)



THE EARTH CABINET AND ITS USES

Superintendent Frank Eurich, of Woodlawn Cemetery, Detroit, has originated one of the most useful devices for the handling of earth at the grave that has been developed in cemetery practice. It is known as the "Earth Cabinet," and has been in use in that cemetery for the last ten years.

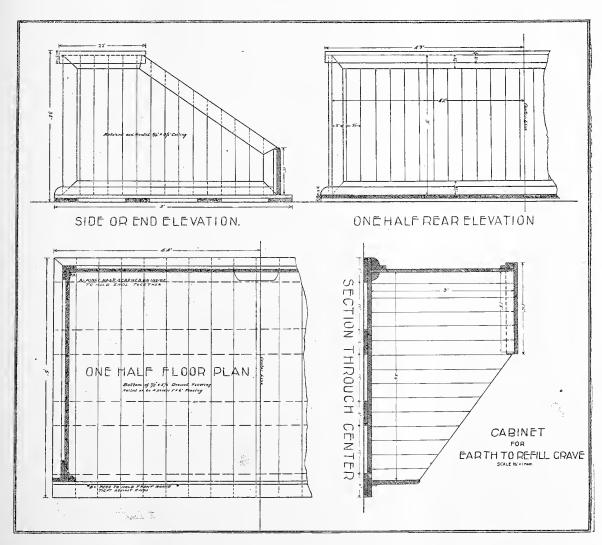
The cabinet consists of a bottom platform, two sides, one back, the top locking cap and the front board. The bottom is constructed strong enough, so as to sustain the weight of the earth, wherever occasion requires the

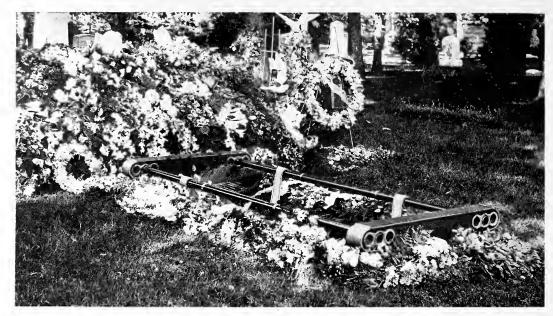
cabinet to be elevated above mounds or grave markers. It may be constructed in one piece, or may be in two sections hinged together. We prefer the one piece bottom, it being stronger. Sides and back are built of %-in. by 3½-in. matched and beaded ceiling material, with a frame of %-in. by 3-in. strips. These have chainpfered edges, which is not shown on the plan. At the corners where the back piece and sides come together, a tight joint is made that prevents the finer sand from escaping. The sloping front is usually covered with

evergreen boughs, screening the earth. Sometimes a green cloth is used.

Sides and back piece are held firms by hinge hasps, one on each side. Front board holding earth back is held in place by hard wood pegs. When grave is to be refilled this board is easily removed and the earth quickly shoveled into the open grave.

The locking cap is constructed of %-in. lumber and must fit snug over the sides and ends. No. 2 grade of white pine has been used; also for sides and ends, Southern Cypress.





THE EARTH CABINET AT THE GRAVESIDE.

Some boxes are painted green, some a drab. Several sizes of boxes are used, they being constructed to accommodate the amount of earth required for refilling.

The platform of the smallest is 6 ft. by 3 ft. 6 in., of the middle size is 7 ft. 3 in. by 4 ft., and the largest is 8 ft. 8 in. by 5 ft.

The cabinet may be set along side the grave or it may be set at right angles to it at either head or foot, or if occasion requires, it may be set away from the grave. It is well to place a piece of canvas under the box, if especially clean work is desired, and let the edge of the canvas come to the edge of the grave. The usual way at Woodlawn is to set the cabinet about 18 ins. to the side of the grave; that allows ample space for the pall bearers to pass along.

The cabinet really serves a double purpose; it receives the filling material for the grave, and also answers for the placing of floral display, as the accompanying picture illustrates. The plain box is also shown.

At Woodlawn, the practice is, and always has been, at all seasons of the year to fill the cabinets first and then remove at once all surplus dirt. Thus the upper loam and good soil is saved for the grave.

OHIO CEMETERY CONVENTION

The Ohio Association of Cemetery Superintendents and Officials held a busy and successful annual meeting at Marion and Delaware June 21 and 22. About seventy-five from all parts of the state attended the first session of the tenth annual convention in the Y. M. C. A. building at Marion the first morning.

The meeting was opened in the morning by prayer by Rev. D. H Bailey. This was followed by an address of welcome delivered by Mayor J. G. Seiter. The mayor complimented the local association on the condition of the local cemetery and on the businesslike manner in which the affairs of the association were handled.

He extended a hearty welcome to the visiting delegates to the city of Marion.

J. J. Stephens, in his response to the mayor's address, thanked the mayor for his complimentary remarks. The delegates then listened to an instructive address by the president, George E. Whittaker, of Youngstown. Mr. Whittaker referred to the promiscuous manner in which many monuments are placed in cemeteries without regard to the size of the lot or the location. Often cemeteries do not appear so well as they might because of this lack of harmony in the placing of monuments. In closing, Mr. Whittaker said the good cemetery superintendent should be a good tree doctor.

After the report of the secretary, a short time was given to the paying



EARTH CABINET EMPTY, READY FOR USE.



EARTH CABINET AND ITS FLORAL COVERING TWENTY FEET FROM GRAVE.

of fees and dues, after which the program of papers was opened.

One of the very interesting papers read was read by George Gossard, of Washington C. H. It was originally presented by O. C. Simonds before the National Association and was on "Use of Shrubberies in Cemeteries."

A general discussion followed the paper and Dr. W. H. Woodward, of Somerset, asked regarding the Irish juniper which had been dying off in nearly all the cemeteries. The men have been unable to explain the cause and Dr. Woodward asked if any of the superintendents present knew any reason. None was advanced. J. C. Dix, of Riverside cemetery in Cleveland, and Frederick Green, of Lakeview cemetery in Cleveland, brought out interesting points in the discussion.

W. H. Collins, of Akron, read an interesting paper on "Superintendents and Their Responsibilities" by the late Timothy McCarthy. C. W. Modie, of Mt. Gilead, read one paper on "Care of Country Cemeteries" by Ezra Downs. Both of these were presented at former National meetings.

Another paper, which was read before the national convention, was read before the state gathering by J. A. Reed, of Canton. It was on "Mistakes in Cemeteries" and was originally written by A. W. Blain, of Detroit, Mich.

In the afternoon at 1:30 o'clock the company went to the Marion cemetery, where the grounds were inspected. A number of short talks were given there. The men were also given a street car ride over the city.

In the evening a banquet was enjoyed from 6:30 to 8 o'clock, and following the banquet the members went to the auditorium where an entertainment program was rendered.

D. R. Crissinger, of Marion, was the toastmaster.

J. J. Stephens, of Columbus, was the first to respond to the toast: "Our Ohio State Association." Frederick Green, of Cleveland, gave an excellent talk on "Velvety Lawns."

"Water" was the subject taken by M. Whittaker, of East Liverpool, and "Herbaceous Plants" by H. A. Church, of Urbana.

After the banquet the men gathered in the auditorium and there entered into a spirited discussion of various phases of cemetery work. The leading topic was in regard to public funerals. Often the superintendents have much difficulty in handling the crowds and the general opinion expressed was that the space should not be roped off. Customarily at public funerals police are provided to handle the crowd and they should be requested to assist in large funerals.

The customary resolutions thanks were passed at this session,

The members of the association went to Delaware over the C., D. & M. at 10 o'clock the next morning and immediately inspected the grounds and buildings of the Ohio Wesleyan university. Later they were escorted to the German Reformed church, where a fine lunch was served. Mayor Leas, of Delaware, addressed the members, giving them a cordial welcome to the city, and Frederick Green, of Lakeview cemetery, Cleveland, gave response.

The Delaware Auto Club gave the members a ride over the city and to Greenwood lake. About fifteen machines were used. The cemetery was visited and the members complimented David Crinton, the superintendent thereof, on the fine condition of his cemetery. After the inspection a meeting was held on the lawn near the chapel and an excellent paper on "Some Winter Work in Cemeteries" presented at the last National convention by Bellett Lawson, Jr., was read by Charles D. Carroll, of the Calvary cemetery in Cleveland. A discussion of weed killers was taken up. Whether greenhouses in cemeteries are paying propositions was also discussed and the general thought was that they

The following officers were elected: Charles Crain, of Portsmouth, president; Fred I. Sloan, of Ironton, vicepresident; and G. C. Anderson, of Sidney, secretary and treasurer; E. A. Sloan, of Marion, delegate to National convention, with J. J. Stephens, of Columbus, as alternate.

It was decided to hold the meeting next year at Sidney and Piqua.

NEW ENGLAND ASSOCIATION

ciation convened at Manchester, N. H., June 28.

Superintendents Smith and Erskine met the visiting superintendents at the depot, about 45 members in all attending. They were escorted to the Valley cemetery, where a light lunch was served, and the grounds were then inspected. Special cars then took them from the Valley cemetery to the Pine Grove cemetery, where a meeting of the association was held in

The New England: Cemetery Asso- the Ursula chapel, at which time several new members were admitted and the regular routine business transacted. Following the business session the members were photographed by Clarence I. Palmer, of the firm of Palmer & Garmon, monument dealers. The superintendents then spent a short time looking over the Pine Grove cemetery, after which the special car was again boarded and the party taken to the Uncanoonuc Mountain and dined at the summit house.

MISSOURI ASSOCIATION MEETING

The third annual meeting of the Missouri Park and Cemetery Improvement Association will take place at St. Louis, Mo., Tuesday, Aug. 22, 1911. The Maryland Hotel, Ninth and Pine streets, has been selected as headquarters, where the first session will be called to order at 9 a. m. by the president, Mr. Wm. Mittelbach. All park and cemetery men of Missouri are earnestly requested to attend. The hotel is conducted on the European plan and the rates are as follows:

Single room and bed without bath.\$1.50 Single room and bed with

bath.....\$2.00 and \$2.50 Double bed without bath. \$2.00 and \$2.50 Double bed with bath.....\$3.00 and \$4.00 Room with two beds and no bath. \$3.00 Room with two beds and bath....\$4.00

One dollar extra for each additional person in room.

Several papers of interest are in preparation.

After the session, the cemeteries, parks, and other places of interest in the city will be visited. We are expecting a good attendance and are sure of having a good time. The hotel management requests that those who desire to attend reserve rooms in advance, if practical. The committee requests that those who expect to attend so notify them as soon as possible, in order that adequate arrangements for their entertainment can be made. Write to either the chairman or the secretary. As you know, St. Louis has many places of interest, and they are well worth seeing. If you come, the committee will endeavor to show you as many of them as the limited time will-allow.

We trust that all park and cemetery men of Missouri will be with us on the twenty-second of August.



BARE AND UNATTRACTIVE CEMETERY LANDSCAPE WITH CROWDED MONUMENTS.

IMPROVING A BARREN CEMETERY LANDSCAPE

The accompanying view of a row of monuments lined up like soldiers on the edge of a cemetery, illustrates to an unusual degree the necessity for careful planning of lots and placing of monuments. The stones are creditable examples of monumental work, and the grounds are neatly kept, yet the effect is hardly more pleasing than a view in an unkempt and dilapidated graveyard.

With a view to showing how such conditions may be avoided or even mitigated by planting and planning we have asked several landscape architects to suggest methods of improving the scene shown in the picture. Their replies follow herewith:

* * *

The principal reason for the stark and desolate look of most cemeteries, reminding one more of a stone yard than a resting place for the dead, is that there is too little foliage to screen the monuments and separate them from each other, and at the same time unite them all into some semblance of a unified composition. The average cemetery is nothing but a collection of unrelated objects which look ugly and forbidding, even when they may be individually beau-

tiful, because they are so jumbled together without any attempt at separation or mitigation by the only thing that can do it, which is foliage. By the proper use of foliage, mostly in the form of shrubbery, evergreen and deciduous, the monuments can be separated from each other and from the general mass, and each one become actually more conspictious in itself, because not confused with the others. The materials to use for this purpose are all the shrubs and small trees that can be found in the nurseryman's catalogue, and the more perennial plants that are used with discretion the better. Large trees, however beautiful and impressive in themselves, are unpopular, because they drip on to the tombs.

For more detailed discussion of this idea I refer you to an article of mine in PARK and CEMETERY some eleven years back, and an article in a forthcoming number of "Landscape Architecture" on the same subject. I enclose a little sketch traced from your picture to give some idea of what might be done by enclosing each monument in its own little garden.

H. A. CAPARN.

New York City.

"How Not To Do It" is a good title to append to the view of a Massachusetts cemetery sent to me for suggestions for improvement.

This view is not an unusual one



SUGGESTION FOR IMPROVEMENT OF THE LANDSCAPE SHOWN ABOVE. Each Monument Planted Off Into Its Own Individual Garden. H. A. Caparn, landscape architect.

and is a little better than the average cemetery that has been designed upon the older ideas of cemetery designing. Too often we are asked what to plant to bring beauty into some spot that has wrongly been laid out. The time to have made the most satisfactory improvements was when the first plan was made. Then land enough could have been left along the street boundary to provide for a plantation of native evergreen trees and flowering shrubs that would have completely hidden the row of houses fronting upon the cemetery. Instead of straight streets, curving ones might have been made, with reserved spaces for groups of trees and shrubbery that would have relieved the dreary, open barrenness seen in so many cemeteries. The monuments for the most part are good, but as they are located they suggest a commercial establishment showing samples for sale. If it is possible to plant behind them a mixture of flowering hardy shrubs of varying height, with a few trees to vary the sky line, a very great improvement would be secured. About the base of the monuments some ivy might be induced to grow, thereby softening the severe lines of the stone work. Possibly the small markers appearing in the front might be set level with the ground, thus securing more breadth of lawn. Cemeteries need not be "stone yards," but if intelligently schemed out they may become spots of beauty -that is, in keeping with the memories we endeavor to commemorate.

HERBERT J. KELLAWAY.

Boston.

* * *

It is very obvious from the appearance of this cemetery, as pictured, that a screen of planting is much needed along the line of hedge in the background. The houses are unduly prominent and the cemetery lacks seclusion, and the quiet restfulness which we all desire in grounds of this nature. We can easily see, too, a lack of background for the lawns of the cemetery proper.

My treatment of the problem would be along two lines. It is possible to make a screen of high evergreen trees edged down on the lawn frontage by the broad leafed evergreen shrubs. This is permissible if the distance from the viewpoint is sufficient to do away with any appearance of oppressive shade and gloominess, which we often see, with the use of too large evergreen trees in too small quarters, such as the surroundings of a small home.

On the other hand, we could confine our use to deciduous planting, which would be highly desirable, but during the winter months we would have less of a screen than with evergreens. A combination of the two might be best, with a careful selection of evergreen trees. But the tendency of the mixture of evergreens and deciduous trees is to deprive the evergreen trees of their lower branches and to crowd the deciduous trees into tall spindling shapes, which are not typical of natural shaped trees. Then, too, the maintenance of such a mixed plantation requires careful trimming and selection of the permanent trees, more so than is the case of a typical evergreen or a typical deciduous plantation.

If you consider these plantings in detail, the screen of the evergreen planting could be arranged as follows: For large evergreen trees you could select any of the spruces, European larch, hemlock, and possibly some of the pines, while they were young. These would make the background, being the taller sorts. Then in between the taller kinds and the lawn you could arrange plantations of the arbor vitaes, red cedars, Mugho pines and hardy conifers under 20 feet high at maturity. Continuing the bank of foliage down to the lawn, among the several evergreens and on the lawn edge you could bank large masses of Rhododendrons, Kalmias and Andromedas and hardy Azaleas. Then under these on the lawn border, where they could be seen by passersby, you could introduce large quantities of the shadebearing perennials, such as Columbine, Blood roots, Trilliums, with a fine selection of ferns, etc.

If immediate effects were desired with the planting of evergreens, we could use temporarily poplars, maples, willows and elms to secure a quick screen, which we would expect to cut out as soon as the evergreens could make a proper high screen of 25 to 35 feet.

In the consideration of the use of deciduous plantings for the high background, I would suggest birches, the various maples, Mountain ash, Catalpa, American ash and possibly the horse chestnut, among others. These should be arranged so that at maturity each one would have a proper separate space.

Between these and toward the lawn I would use the larger arborescent shrubs, like tree lilacs, Siberian Pea

trees, the various thorns, etc.; then fc: the lower shrubbery we might use the red osier dogwoods, a good selection of lilacs, spiraea, syringas and other desirable ornamental shrubs.

In the low border, to make the bank of foliage more perfect, we might find Indian currants, snow berries, rhodotypos, Thunberg's Barberry, dwarf spiraea, and on prominent points could locate the sun-loving perennials in large masses, such as the day lilies, phlox, iris, peonies and so on with a wide range of selection.

With such a border I should expect to use many quick growing kinds of trees, that could be cut out later

If there was a variation of height permissible, I would like to vary the sky line by the use of lower trees and shrubbery, in places, instead of the higher. But if the high screen was necessary throughout, I would add interest to the plantation by the use of large quantities of a few kinds of trees, planted at the proper distance for mature growth, and not mix the various kinds of trees more than necessary.

In other words, I would consider it ideal to have in September and October a space of 200 or 300 feet of flaming red maples, or in June 30 flowering catalpas placed together, or in April 30 or 40 of the Larch trees bursting into their tender green leaf. The same would apply to the evergreens and other shrubbery. I would make the masses of one planting in such quantity as to be typical of that. section of the plantation. I would direct attention to its perfection by its quantity, by this predomination. We can add variety by other selections near by, but I would desire that such plantation be so interesting, so typical and in such generous quantities that it would direct the attention of the passer-by. In other words, I would make a selection of lilacs, which would be worth a visit to the cemetery, of all the horticulturists in that city, when they were in bloom. I would like to see a large mass of, say, white phlox, in such a quantity that it resembled a bank of snow. I could imagine nothing better than a background of 40 or 50 large blue Colorado spruces contrasted with the white snow of January. In this way good effects could be obtained, such as found in the forests and roadsides.

It is such typical work that makes so very attractive the lilac show of the Rochester parks, and the Rhododendren display of Prof. Sargent's place in Brooklyn, Mass., and on the Hunnewell estate in Wellesley, Mass.

Charles H. Ramspell.

Minneapolis, Minn.

* * *

Cemetery planting does not differ from that of a home yard in principle, except that with the latter we have a house to deal with, and with the former, monuments on a much smaller scale. The enclosed photograph shows how not to plant a cemetery, or rather is chiefly conspicuous for its lack of planting, notwithstanding that the monuments are of fairly good quality.

The first effort of a landscape architect would be to mask, as far as possible, the view of the houses outside of the property. This cannot be done entirely nor is it necessary or advisable. The straight hedge as seen only emphasizes the house forms. A more irregular and much higher mass would tend to obliterate some of the architectural lines and would so conform with the roof lines that the re-

sult would be interesting rather than otherwise. The planting would be a mass of small trees and shrubbery placed directly against the border, say of mountain ash, birch, and buckeye, and of lilacs, buckthorn, syringas, spreas, cranberries, dogwood, shadbush and other strong-growing, dense bushes. The width need not be great; ten to fifteen or eighteen feet wide at most, and somewhat irregular.

For interior planting the plants should conform with structural lines like those of the drives and monuments, or with imaginary lines like those surrounding each lot. A shrub or two, or a few perennials grouped with each monument make both monument and planting more interesting. If the drive is bordered occasionally with a group of shrubbery, it again receives an interest by breaking the monotony of the lawn so broken already with monuments. This latter may coincide with planting which helps to define the outlines of the lots. The latter may be placed in such a way as not to make a hard continuous border, but be a gentle touch

here and there marking lightly where the outline of the lot in general is.

These are all suggestions so far as the view in question is concerned. As a general principle, however, it is desirable to break up cemetery area into a number of smaller units, while if the same area were a park, the units would be larger, that is, to introduce occasionally a border of shrubbery to separate a particular spot from all the areas around it. In so doing one must not forget that a long continuous view, no matter how narrow, over an unobstructed bit of lawn is the most attractive treatment of any property.

As to the choice of kinds which are to come close under the eye the plants chosen should be the most refined, as for instance, the various Spiraeas, especially the Spiraea Van Houttei, and Persian lilac, Deutzia gracilis and Weigela. Among the perennials one would take only those which are most certain to persist like the peonies and German iris.

A. Phelps Wyman. Minneapolis, Minn.

ALLEGHENY CEMETERY GREENHOUSE SYSTEM

In Allegheny Cemetery, Pittsburg, a greater use is made of palms for the adornment of lots than in any other cemetery in the country outside of the semi-tropics. There is a dignity about this form of decoration that the lot owners like. In an old cemetery where lots crowd upon one another, and monuments are frequent and conspicuous, it often is inconvenient to use hardy shrubs on the lots by reason of their over-reaching character, but palms in considerable size and number may be set out where most desired as a decoration for the lot or as a proper support or frame for monuments. Not infrequently in the case of overcrowded stone-work, a tasteful interplacing of palms softens the effect. In the case of several of the most heavily endowed lots in Allegheny, a palm decoration in summer is designated.

With these views of Superintendent Falconer on palm decorations, it is not surprising that the palm-house should be an important feature of the greenhouses illustrated here from one of the plates in the handsome Allegheny Cemetery Book, to which reference has been made in these pages.

The Allegheny greenhouse system is a block of glass structures consisting of a spacious palm house 130 feet long by 31 feet wide, and five adjoining lesser houses at the back. Two of

these are 21 feet wide each and three of them 10 feet wide, and all five are 99 feet long. In the palm house are wintered all of the beautiful palms seen throughout the cemetery grounds in the summer time; the lesser houses with an array of auxiliary cold frames and hotbeds are devoted to the propagation and cultivation of Easter and summer bedding plants. The palms are mostly used in the ornamentation of endowed lots, but other lot holders may also engage some of them for the season. The cemetery does not sell these palms, it only rents them for the summer months, watering and caretaking being included. The cemetery does not house or care for anybody else's plants over winter. The scores of thousands of bedding or summer plants raised in the small greenhouses and hotbeds are used broadcast throughout the grounds in filling the cemetery flower beds, and the beds and graves belonging to lot owners, endowed or otherwise. These plants are sold outright. But no plants or flowers of any kind are sold to go outside of the cemetery.

Seventeen years ago when these greenhouses were built they were ample enough for all demands, but today they are not. Since then 948 new lots have been added, the endowed lots have nearly trebled, 17,208 new interments have been made, and the

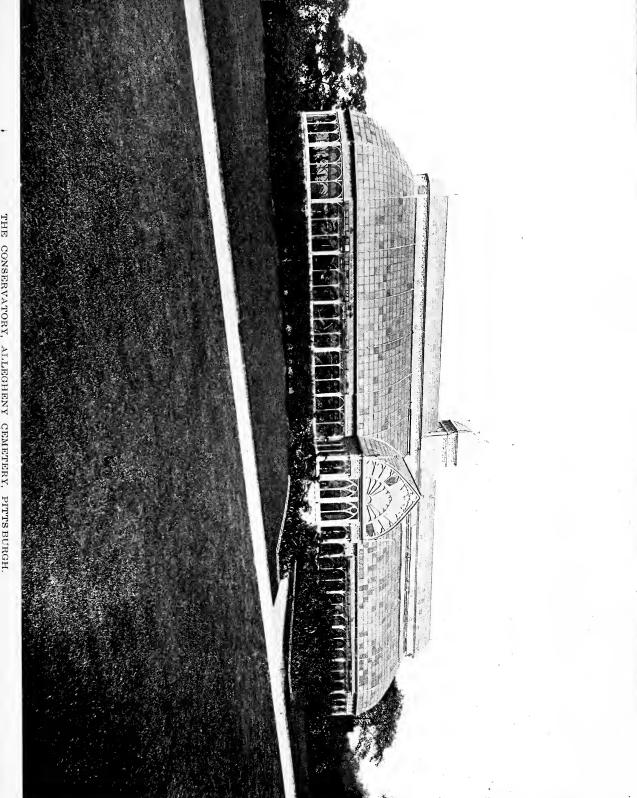
methods and requirements of floral decoration have extended vastly beyond the requirements of that period. In May last year they had 35,000 alternanthera, 16,000 geraniums, 6,000 sweet alyssum, 5,000 echeverias, 5,000 English ivy, and in lesser numbers verbenas, petunias, vinca, centaurea, etc., etc., all things together about 100,000 plants.

In 1905 two new Lord & Burnham steam boilers were installed in place of two worn-out second-hand ones that had been in use before.

A contract has now been made for the erection of an additional greenhouse 91 feet long and 22 feet wide with a corresponding work room and a 10-foot high cellar under the whole.

Spring-blooming bulbous plants as hyacinths, tulips, narcissus are usually planted in October or November to succeed the summer bedding plants, and come into bloom in April and May, before it is time to again set out the geraniums, etc. After blooming, these bulbous plants soon become unsightly, and are removed.

Liberal scope is allowed in the planting of summer flowers, as geraniums, petunias and alternanthera, but planting them in the grass around graves or dotting them in the grass in the lots, is not permitted. As soon as they are destroyed by frost or become unsightly, they are cleared away.



THE CONSERVATORY, ALLEGHENY CEMETERY, PITTS BURGH.

COMBINED OFFICE, RESIDENCE AND CHAPEL



SUPERINTENDENT'S RESIDENCE, CHAPEL AND OFFICE, FOREST HILL CEMETERY, SHELBYVILLE, IND.

In the smaller cemeteries where the same building serves for chapel, office, and residence for the superintendent, the architectural problem of making it convenient for all of these uses is no small task. In the new building recently erected in Forest Hill Cemetery, Shelbyville, Ind., the exigencies of all three of the uses mentioned have been provided for in a building that is of no little architectural beauty. It is sightly enough to harmonize with the character of

the grounds, and at the same time well laid out to serve a variety of purposes.

This unpretentious building has managed to combine the character of both chapel and residence in its exterior appearance in an unusually successful manner. The chapel may also be used for a waiting or rest room. It is provided with office rooms, toilet rooms and other conveniences for the comfort of the public. All who

visit the cemetery are free to use the building.

It is built of Colonial brick, with stone trimmings and tile roof. All who have seen the building are warm in their praise of the officers of the cemetery association, the architect, M. L. Carr, of Indianapolis, and the contractor, Marion Moores, of Shelbyville.

Oak Hill Cemetery Association was organized in 1884 as a stock company The directors purchased about

thirty-one acres of ground, east of the city.

From the beginning of the organization a number of the stockholders felt that the association should not be of a mercenary character. In 1892, the stockholders unanimously agreed to transfer the property to a new corporation, the rules of which provided that all of the proceeds from the sale of lots and from all other sources should be used in further beautifying and extending the cemetery grounds.

The present officers are as follows: President, H. C. Morrison; vicepresident, T. W. Fleming; secretary and treasurer, G. W. F. Kirk.

Jesse M. Keith is the superintendent, having succeeded his father, Joseph Keith, upon his death some time ago.

A FINE TYPE OF PRIVATE COLUMBARIUM

The Josephthal Columbarium is a fine example of architecture and sculpture as applied to the construction of that rarest form of cemetery memorial, the private columbarium. The steady growth of the idea of cremation has familiarized us with the public columbarium, of which there are twenty-six or seven in this country, but there are only two or three other examples in this country of the private columbarium built to receive the ashes of the members of an individual family. Two of these have previously been illustrated in these pages. Monuments with a niche or other provision for the reception of an urn are also occasionally seen.

This one was designed and modeled by Ernest Wise Keyser, the well-known New York sculptor, who also executed one of the other columbariums illustrated in these pages. The symbolic guardian figure, the urn and decorative rays on the front of the structure have been executed with delicate incisive touch and have been well composed to meet the rather difficult problem of filling the unusual space formed by the doors at either side of the figure. These are of bronze, very plain, and when open reveal marble paneled doors inscribed with the names of those whose ashes are deposited within. The whole front with its plain severe lines and massive construction gives an effect of monumental dignity and simplicity. The memorial is erected in New York City and the granite work was done by the Adler Granite and Monumental Works. The bronze was cast by Jno. Williams, Inc., of New York.



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JOSEPHTHAL COLUMBARIUM, NEW YORK.

Ernest Wise Keyser, Sc.

CEMETERY NOTES

THE COVER ILLUSTRATION

The picture shown on the cover of this issue is a water view from the handsome illustrated book of Woodlawn Cemetery, New York. It is a rare example of both photography and landscape art in picture making. The picture is completely framed in the foreground by the cluster of Rhododendrons in bloom, and the section of stone wall reaching into the scene at the left. The trees and other planting carry the frame all the way round the picture, with a break at the point of chief interest by the handsome Chas. Watrous mausoleum. This square, tower-like structure of Vermont marble throws its shadow on the sheet of water, whose glassy surface makes the center of the picture and contrasts with the character of the foliage around it.

A. A. C. S. CONVENTION AT PHILADELPHIA

George M. Painter, chairman of the Executive Committee for the Philadelphia meeting of the A. A. C. S. September 12-15, writes that the programme is gradually assuming definite form. Headquarters will be at the Continental Hotel, and four days will be devoted to the business of the convention and the customary outings at the local parks and cemeteries. One day will be devoted to a trip to Wilmington, Del., by request of the cemetery officials of that city. invitation has also been received to visit Dreer's Nurseries at Riverton, but that trip has not been definitely decided upon. "Motor Trucks for Cemetery Use," "Community Mausoleums," "Cemetery Records" "Cemeteries of Today and Those Twentyfive Years Ago" are among the subjects that will be discussed in formal papers and an address on cemetery improvements illustrated by stereopticon will be an interesting feature of the programme. Arrangements are being made to provide for an exhibition at the Con-Hotel of photographs, models, tools, records, etc. This is becoming an instructive feature of the conventions and one that deserves to be made more of for the mutual benefit of both buyer and seller. The executive committee will welcome any suggestions that may be

offered and they are particularly desirous of receiving questions for the "Question Box." Mr. Painter's address is Westminster cemetery and Chas. B. Jefferson, secretary of the committee, may be addressed in care of West Laurel Hill Cemetery Philadelphia, Pa.

Mr. Herbert J. Kellaway, Boston, Mass., has recently made a report upon the cemetery of Antrim, N. H., its existing conditions, and outlining methods for improvement.

Nashville, Tenn., is to have a new cemetry, to be known as "Hollywood," located just east of Mount Olivet. The tract of land acquired by the new company comprises forty acres. The landscape plan has been furnished by Mr. Max Reder, landscape gardener.

Incorporation papers have been filed at Birmingham, Ala., by the Oakwood Cemetery Company. The company will have an authorized capital of \$75,000, of which \$72,000 is paid in. This company will establish and maintain cemeteries. W. K. Munroe is secretary.

Mound cemetery, Racine, Wis., is fast filling up and the cemetery committee is about to open the new cemetery, formerly known as the Osborn farm, northwest of the present grounds. The committee has been visiting Forest Home Cemetery, Milwaukee, to obtain pointers on up-to-date practice.

The draft of the deed transferring the confederate cemetery of Springfield, Mo., to the U. S. government has been approved at Washington, and everything is in readiness for the transfer. The exercises will be held in September and it is proposed to make the day one to be remembered.

Governor Dix of New York has signed the bill authorizing the trustees of the village of Brownville to convey to the Brownville Cemetery Association the cemeteries owned by the village. The transfer of the cemetery from the village of Brownsville will now be made to the Cemetery Association, directors will be elected and plans perfected for accumulating a perpetual care fund, etc.

The federal court of appeals at St. Paul, Minn., has reversed the decision of the lower court in the case of W. J. Townsend against the Beatrice Cemetery Association, Beatrice, Neb., wherein the plaintiff sought to collect on a judgment against the defendant. By foreclosing a mortgage on the property of the cemetery association, Townsend

secured a judgment against the association. The amount originally sued for was about \$6,000, and the interest since 1898, when the action was started, will make the claims amount to near \$10,000. Up to this time the repeated efforts of the plaintiff to secure the funds of the cemetery association have failed. Details of the decision are not at hand.

Articles of incorporation of the Redlands Cemetery Company, Redlands, Calif., were recently recorded. The tract of land bought comprises 480 acres, 40 of which will be improved for cemetery purposes. It is located in the San Timoteo Canyon. Capital stock is placed at \$25,000.

Indignant protests are being hurled at the Nassau county board of supervisors at Mineola, L. I., to protest against the establishment of a cemetery at Central Park, a flourishing community just west of Farmingdale. The application for the new cemetery was made by the trustees of St. Patrick's Cathedral of New York, in order to provide a new place of burial for those of the Catholic faith, and to establish an adjunct to Calvary Cemetery, in Long Island City, which latter burial place is filling up. The New York diocese owns 241 acres immediately north of the railroad at Central Park and adjacent to the land development of a suburban land company. The objections to this proposed cemetery are nonsectarian and are based on the fact that cemeteries of any and every denomination are menaces to the general growth and progress of any com-

A tract of 156 acres, known as the Emery farm, in Montgomery county, N. Y., near Lawndale station, on the New York Short Line of the Philadelphia & Reading Railway, has been sold by B. B. Lister for Dr. A. M. Davis and Walter E. Rex, to George T. Sale, who represents a syndicate, for very close to \$100,000. The purchasers, it is said, intend to lay the land out for cemetery purposes.

In an effort to force the payment of \$116,000.60, which he claims is due him from the Mount Tamalpais Cemetery Association, San Rafael, Calif., E. B. du Bois, son of the founder of the cemetery, has instituted attachment proceedings.

Suit to compel the abandonment of a cemetery located about a mile northeast of Phoenix, Ariz., has been brought against Rt. Rev. Henry Granjon, bishop of Arizona, by property owners adjacent to the tract which comprises the cemetery. A restraining order has been granted.

Complications appear clearly possible

(Concluded on page X)

TOPICAL INDEX to OUTDOOR LITERATURE

An Index to articles on Gardening, Forestry, Park, Cemetery and Civic Improvement and kindred subjects in leading general and special magazines

Subscriptions will be received for any magazine or periodical at club rates with Park and Cemetery. Publications in which articles appear are listed below, and referred to by abbreviations, thus: S. L. 8:67-8, Feb. 0.9, means: Suburban Life, vol. 8, pages 67-8, February, 1909, Single copies should be ordered direct from the publications at addresses given below.

PUBLICATIONS INDEXED AND ABBREVIATIONS USED.

American Botanist, Jollet, Ill. (A. B.), 75c year; 20c copy.
American City, The, (Am. C.), New York, \$1.00 year; 10c copy.
American Florist, Chicago (A. F.), \$1.00

American Florist, Chicago (A. F.), \$1.00 year; 5c copy.

American Homes and Gardens, New York (A. H. G.), \$3.00 year; 25c copy.

Architectural Record, New York (Arch. Rec.), \$3.00 year; 25c copy.

Art and Progress (A. & P.), Washington, D. C.; \$1.50 yr.; single copy 15c.

Beautiful Homes (B. H.), St. Louis, \$1.00 year; 10c copy.

Canadian Florist, The, Peterboro, Ont., Can. (C. F.), \$1.00 year; 10c copy.

Canadian Munleipal Journal, Montreal (C. M. J.), \$1.00 year; 10c copy.

City Hall, The, Des Moines, Ia. (C. H.), \$2.00 year; 20c copy.

Conservation, Washington, D. C. (Cons.), \$1.00 year; 10c copy.

Country Life in America, New York City (C. L. A.), \$3.00 year; single copy.

25c.
Country Gentleman, Albany, N. Y. (C. Country Gentleman, Albany, N. Y. (C. G.), \$1.50 year; 20c copy.
Century Magazine, New York City (Cent.), \$3.00 year; 35c copy.
Survey, The, New York City (Sur.), \$2.00 year; 10c copy.
Chautauquan, The, Chautauqua, N. Y. (Chaut.), \$2.00 year; 25c copy.
Craftsman, The, New York City (Cr.), \$3.00 year; 25c copy.
Emblamers' Monthly Chicago (E. M.)

Embalmers' Monthly, Chicago (E. M.), \$1.00 year; 10c copy. Fern Bulletin, Joliet, Ill. (F. B.), 75c

\$1.00 year; 10c copy.
Fern Bulletin, Joliet, Ill. (F. B.), 75c
year; 20c copy.
Florists' Exchange, New York City (F.
E.), \$1.00 year; single copy, 5c.
Florists' Review, Chicago (F. R.), \$1.00
year; 5c copy.
Forest Leaves, Philadelphia, Pa. (For.
L.), \$1.00 year; single copy, 10c.
Fruit Grower (F. G.), St. Joseph, Me.,
\$1.00 a year; 10c copy.
Gardener's Chronicle of America, Jersey

D ABBREVIATIONS USED.

City, N. J. (G. C. A.), \$1.00 year; single copy, 10c.

Garden Magazine, New York City (G. M.), \$1.00 year; single copy, 15c.

Gardening, Chicago (Gard.), \$2.00 year; single copy, 10c.

Gartenkunst, die, Frankfurt, Germany (German), G. K., \$4.00 year; 50c copy.

Good Roads Magazine, New York (G. R. M.), \$1.00 year; single copy. 10c.

Horticulture, Boston (Hort.), \$1.00 year; single copy. 5c.

House Beautiful (H. B.), Chicago: \$3.00

Horticulture, Boston (Hort.), \$1.00 year; single copy. 5c.
House Beautiful (H. B.), Chicago; \$3.00 year; 25c copy.
House and Garden, Philadelphia (H. G.), \$5.00 year; 50c copy.
Independent, The, New York (Ind.), \$3.00 year; 25c copy.
Landscape Architecture (L. A.), Harrisburg, Pa.; \$2.00 year; 50c copy.
Meehan's Garden Bulletin, Germantown, Philadelphia (M. G. B.) 50c year; 5c copy.

town, Finance, 5c copy.
5c copy.
Minnesota Horticulturist, Minneapolls
(M. H.), \$1.00 year; single copy, 10c.
Moeller's Deutsche Gaertner-Zeitung,
Germany, (German), M. D. G.,

Moeller's Deutsche Gaerther-Zeitung, Erfurt, Germany, (German), M. D. G., \$3.00 year; 10c copv. Municipal Engineering, Indianapolls, Ind. (M. E.), \$3 00 year; single copy, 25c. Municipal Journal and Engineer, New York (M. J. E.), \$3.00 year; single copy, 25c.

York (M. J. E.), \$3.00 year, single 25c.

Monumental News, Chicago (M. N.), \$1.00 year; single copy, 10c.

National Nurseryman, Rochester, N. Y. (N. N.), \$1.00 year; single copy, 10c.

Pacific Municipalities, San Francisco (P. M.), \$1.00 year; 10c copy.

Revue Horticole, Paris (Rev. Hort.), French, \$4.50 year; 50c copy.

Scientific American, New York (Scl. Am.), \$3.00 year; 10c copy.

Suburban Life, New York (S. L.), \$3.00 year; 25c copy. Survey, New York (Sur.), \$2.00 year; 10c copy.
Woodland and Roadslde, Boston (W. R.),

50c year; single copy, 10c.

Civic Improvements, Home Grounds

Awakening of the Cities, H. Oven. Illust. World's Work, Garden City, N. Y. 22; 14494-506, June '11.

Anna Coleman Ladd, Sculptor, Anna Seaton Schmidt. Illust. A. & P., 2; 251-5, July '11.

An American City's Shop Fronts, F. W. Coburn. Illust. A. & P., 2; 256-61. July, '11.

Environment of Home, A. E. Slater. Illust. Canadian Magazine, Toronto, Ont., 37; 149-55. June, '11.

Free Public Baths of St. Paul, L. Curry Morton. Illust. Am. C., 4; 259-3. June, '10.

Swimming Pools in the Garden, W. W. Smith. Illust. S. L., 13; 25-6. July, '11.

The Cure for the Smoke Evil, H. M. Wilson. Am. C., 4; 263-6. June, '11.

The Modernization of an Old Historic Town, W. M. Martin. Illust. Am. C. 4; 255-8. June, '11.

Work for Civic Betterment in North Dakota, Hugh Gordon. Illust. S. L., 13; 32. July, '11.

Gardens and Landscape Gardening

A Notable Pacific Coast Botanic Garden. F. E., 31; 1172 B. June 10, '11.

Border Garden, A. H. Suill. A. H. G. 8; Sup. 13. June, '11.

Gardens in Which to Live and Play. Illust. Cr. 20; 321-3. June, '11.

Making Water Effects a Feature, W. S. Rogers. Illust. G. M., 13; 349-50. June, '11.

Rustic Building Is Simple and Interesting, Clara C. Smith. Illust. S. L., 13; 30. July, '11.

Science and Art in Garden Design. Illust. (German) G. K. 13; 105-15. June, '11.

The Spring Exhibit of the Bavarian Society of Landscape Gardeners at Munich. (German) Illusts. M. D. G., 26; 242-8. May 27, '11.

Parks, Cemeteries and Public Grounds

Adaptation of Concrete to Long Span Bridges, F. Barber. G. R. M., 12; 214-6. June, '11.

Bituminous Dust Preventatives and Road Binders, P. Hubbard. U. S. Agric. Dept. Year Book, 1910. 297-

Highland Park, Rochester, N. Y.; A. F., 36; 1040-1. June 10, '11.

Maintenance, Repair and Reconstruction of Macadam Roads, D. W. Seitz. G. R. M., 12; 213. June, '11.

Modern Methods of Making Roads, Wm. E. Voorhees. G. R. M., 12; 223-6. Junne,

Street Widths and Their Subdivisions for Various Purposes, N. P. Lewis. G. R. M., 12; 227. June, '11.

The Bronx Borough Experimental Roadways. G. R. M., 12; 217-20. June, '11.

Trees, Shrubs and Plants

An Inexpensive Water-Lily Pond, Lena Smith Ford. Illust. G. M.,13; 353. July, '11.

American Peony Society Annual Meeting. Illust. F. R., 28; 7-13. June 15, '11.

American Peony Society Annual Meeting. Illust. A. F., 36; 1084-6. June 17, '11.

American Seed Trade Assn., 29th Annual Convention. F. E., 31; 1264-5. June 24, '11.

American Assn. of Nurserymen, Annual Convention. F. E., 31; 1268-9. June 24, '11.

Broad-Leaved Evergreens for Limestone Districts. C. L. A., 20; 55. Tune 1, '11.

City Forestry in Chicago, J. H. Prost. Illust. Am. C., 4; 278-81. June, '11. Fertilizers for Use by the Florists, H. B. Dorner. F. E., 31; 1172 B-1172 C. June 10, '11.

Fertilizers for Mature Trees, C. D. Jarvis. N. N., 19; 227. June, '11. Forcing Lilacs Around Paris, Yosef Vales. Hort 13; June 3, '11. (French).

Gas Heating for Victorias Outdoors, E. T. Harvey. Illust. G. M., 13; 344-5. July, '11.

Our Friends the Trees. Cr., 20; 272-7. June, '11.

Photography's Debt to the Treetops, C. P. Cushing. Illust. Outing, New York, 58; 273-83. June, '11.

Pruning the Shrubbery. F. R., 28; June 17, '11.

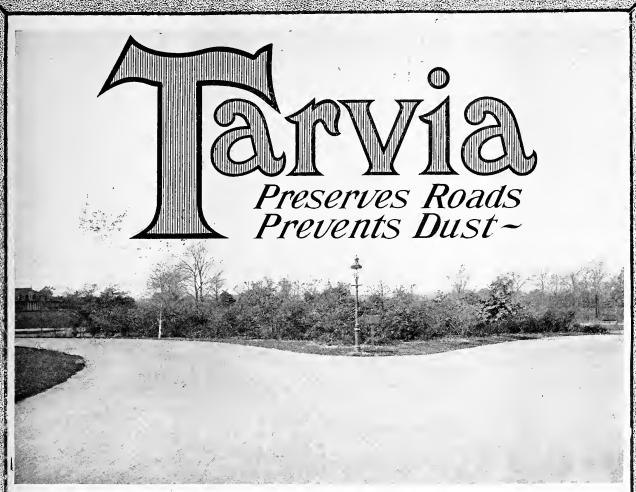
Roses in 1910, Robt. Kift. Illust. A. F., 36; 1036-7. June 10, '11.

Rose Culture, W. J. Keimel. A. F., 36; 1038-9. June 10, '11.

Rhododendrons at the Arnold Arboretum. Host, 13; 865. June 10,

Significance of Lead Arsenate Composition, W. H. Volck. Science N. S., New York, 33; 866-70. June 2, '11

American Floriculture, Jas. South



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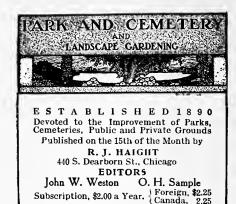
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McHutchinson. A. F., 36; 1090-1. June 17, '11.

Summer Flowering Hardy Vines, W. C. McCollom. Illust. G. M., 13; 346-9. July, '11.

Summer Blooming Bulbs, Isaac S. Hendrickson. G. C. A., 13; 46-48. June, '11.

Trying Out New Roses. A. F., 36; 1037-8. June 10, '11.

The Most Rugged of the Hardy Evergreens, C. L. Miller. Illust. G. M., 13; 350-2. June, '11.

The Planting of Porches. A. F., 36; 1133-4. June 24, '11.

The Truth About the Weeping Trees, P. T. Barnes. Illust. S. L., 13; 13-5. What Hybridizing Has Done for the Petunia, A. E. Doolittle. Illust. S. L., 13; 17-18. July, '11.

REPORTS, ETC.. RECEIVED

Herbert J. Kellaway, the Boston landscape architect, has prepared an interesting and practical, working report on The Improvement of the Mystic Valley at Winchester, Mass. It includes a plan of the territory which lies along the Aberjona River and in the neighborhood of Mystic Lake. The report served the very good purpose of securing an almost unanimous vote for a \$90,000 bond issue to carry out the plan of improvement. The report was widely distributed just before the election and the vote on the bond proposal was 483 for and five against. The area to be improved is in reality a part of the Boston Metropolitan park system.

The U. S. Department of Agriculture has just issued as bulletin No. 94 of the office of Public Roads, an interesting report on "Progress Reports of Experiments in Dust Prevention and Road Preservation in 1910." It is a very valuable summary of a great variety of comparative experiments on modern road making and dust prevention that will be appreciated by any one interested in park road making.

The Town of Corey, Ala., is making an unusual effort in building a town on a definite plan from the start, and the



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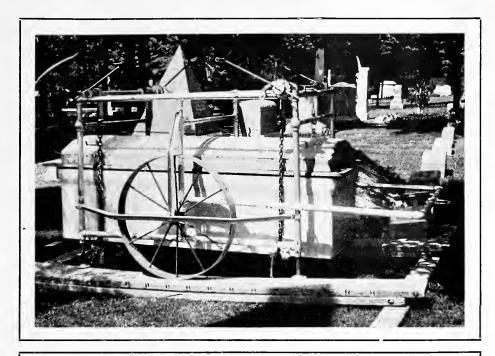
It is used primarily as a dustlayer, but leaves a mat of asphalt on the surface of the road which effectually profects it from wear. One treatment with a fraction of a gallon to the square yard is guaranteed to render the road dustless for a year. One treatment for two successive years will render the road dustless for three years and protect it from wear and wash.

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ered into it, as simply as the ordinary casket can be lowered

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It is supplied with ratchets and brakes, so that there is no chance for a mishap of any kind. For disinterring purposes, there is a set of hooks, which hook under the rough box or casket, and it can then be drawn up into the frame and moved to any part of the cemetery and reburied.

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Photographs showing this device in operation from many different views will be forwarded on application. The demand for our elevator for mausoleums is most satisfactory.

Write the

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Corner Detroit & Hird Sts., Cleveland, Ohio for particulars.

Jemison Real Estate and Insurance Co., of Birmingham, Ala., send a number of the Jemison Magazine giving an account of the first twelve months' development of what is claimed to be a model industrial town.

The Arnold Arboretum is issuing a series of little bulletins of popular information about these fine grounds that are designed to acquaint the public with the features of particular interest that may be seen on the grounds. They are issued weekly and are a valuable and timely guide to the attractions of this wonderful collection of trees and shrubs.

The article descriptive of the department of landscape architecture at Harvard University that recently appeared in "Landscape Architecture" has been reprinted in booklet form.

TRADE PUBLICATIONS

The Bronze Perpetual Care Stakes of the Quadriga Mfg. Co., of Chicago, illustrated and described in a well-prepared and handsomely printed booklet of eight pages.

Henderson's Midsummer Catalog, 1911, from Peter Henderson & Co., New York.

"The Weed Problem Solved" is the title of an attractively printed little booklet descriptive of "Herbicide" the weed killer manufactured by the Reade Mfg. Co., of Hoboken, N. J.

ASKED AND ANSWERED

(Concluded from page 595)

to sow on a lot of 300 sq. ft.: For a good lawn you should have about two quarts.

Bellett Lawson, Jr.

Chicago.

We are having trouble with some kind of an insect which seems to be killing our spruce trees, and thought possibly you might be able to give us some information as to how to save them, through your columns "Asked and Answered." The older employees of the cemetery seem to think that the trees are being killed by a little red spider, but so minute that it cannot be seen by the naked eye, and we are not quite so sure whether that is the real cause or not, but it may have come to your notice through other cemetery associations, they having suffered from the same cause.

E. C. P., Ia.

In reference to your subscriber's spruce trees: Six years ago I had an experience with some beautiful specimens of native white and black spruce, and from the meager description given I take it for granted that subscriber's trees are similarly attacked. If so, spray with soap-suds. I do not sup-

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proof that the little things are not slighted. Our Building Superintendents have been called cranks because they make such a "holler" if things are not up to snuff. If there is any kicking to be done, we prefer

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pose that the brand of soap makes much difference, but I used Queen Anne soap, using a pound to a gallon of water, well diluted. In spraying, which should be done in the morning, the limbs should be slightly lifted so that the spray reaches the underside of the foliage.

John Reid.

Detroit, Mich.

OBITUARY

It is with exceeding regret that we have to record the death of Mr. Lou C. Barker, the superintendent of only three months' standing of Forest Hills Cemetery, Chattanooga, Tenn. He died after a week's illness of pneumonia, on June 15, and his was the third death in his family from the same dread disease within three weeks, his wife and her mother preceding him. Mr. Barker had succeeded Mr. William Taylor and had made a good start in his work. The work of the office will be temporarily conducted by Dr. Bushnell.

PUBLISHER'S NOTES

In the foreign trade opportunities suggested in "Daily Consular and Trade Reports": A report from an American consular officer states that one of the largest department stores in western Canada contemplates the purchase of from 5 to 10 carloads of wire fence and fencing, and he suggests that American manufacturers of these lines communicate with this firm.

CEMETERY NOTES (Concluded from page 604)

in connection with the question of reopening of Mount Calvary Cemetery, Denver, Colo., as a burial ground. Lot owners fear that their property rights in their lots will be jeopardized, while outside property owners protest on business grounds.

Clayton Hart, superintendent of the National Cemetery, Springfield, Mo., for the past five years, has resigned. Mr. Hart has been superintendent of national cemeteries for the past 45 years, but has decided to move to Jefferson City to make his future home. He came to Springfield from Murfreesboro, Tenn. The first national cemetery under his charge was one at Keokuk, Ia. J. S. Gray, superintendent Hart's assistant, will be acting superintendent until the appointment of a successor by the quartermaster's department at Jefferson Barracks.

The contract for disinterring the remains of 4,000 soldiers buried at the National Cemetery at Fort Brown, Tex., was let by the government to N. E. Randall of Brownsville. The remains are to be removed to the National Cemetery at Pineville, La., and the cemetery at Brownsville will be abandoned.



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and floating down stream. The device may be handled in lengths to a great extent from the banks, or just as well from boats on larger lakes. In use by many Parks and Cemeteries, and highly recommended here and abroad. Write for illustrated circular, references, etc.

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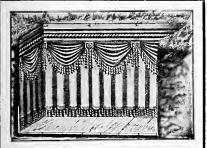


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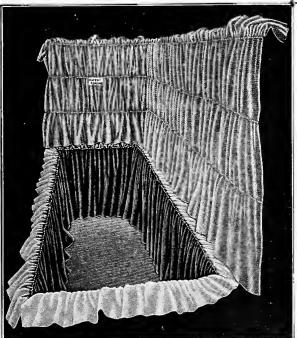
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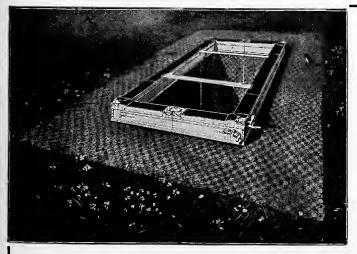
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At the Winchester, Mass., Town meeting, held June 15, it was voted that the town appropriate and set aside \$32,400 as a permanent fund to be known as the "Permanent Care Fund, Wildwood Cemetery," to be invested by the town treasurer under the direction of the cemetery commissioners, the income to be used for the care of lots. An additional appropriation of \$1,200 for gypsy and brown-tail moth work was made.

CEMETERY IMPROVEMENTS

Two new sections have been opened this spring in SS. Peter and Paul Cemetery of St. Louis, Mo., whereon no mounds are permitted, and markers only 6 inches high. This regulation is meeting with the approval and co-operation of the patrons of the cemetery.

The Beatrice Cemetery Association, Beatrice, Neb., has let a contract for some 3,000 lineal feet of macadam driveways to Edward J. Koenig, landscape gardener and contractor, in Evergreen Home Cemetery. This will include the construction of concrete gutters and curbing along all the driveways. This may be but the beginning of this improvement.

Seven acres have been acquired for an addition to the northern end of Oak Hill Cemetery, Evansville, Ind. This will eventually be improved and laid off

The Jewish society of the Sons of Truth of Leavenworth, Kas., has begun the work of beautifying the cemetery northwest of the city and \$1,000 is to be expended in the construction of a stone wall surmounted by an iron fence.

The directors of the Lone Fir lot owners' association, Portland, Ore., have decided that when \$8,000 has been subscribed the improvement of the cemetery will be started. Most of it is in hand. The elaborate plans suggested by Mr. Howard Evarts Weed, of Chicago, have been modified, and the plan now is to clean up and improve the cemetery and repair the fences generally, but there will be no disturbances of graves and monuments. Wilson Benefiel, long the superintendent, has severed his connection with the cemetery and is succeeded by L. N. Guy. Mr. Guy will have full charge of the grounds. It is the purpose of the management to raise a permanent fund for the care of this pioneer cemetery.

At a recent meeting of the directors of the Hillside Cemetery Association, Middletown, N. Y., it was decided to proceed at once with the work of remodeling the entrances to the ceme-

About \$6,000 is to be expended by the Fairmount Cemetery Association, Newark, N. J., for the erection of an addi-

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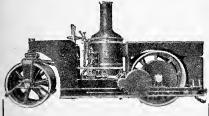
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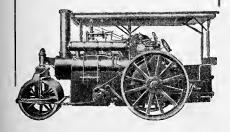
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Adelphi Lodge No. 8, Independent Order of Odd Fellows, has been improving the Odd Fellows' Cemetery at Parkersburg, W. Va. An iron picket fence with cement base has been constructed along the front and one of woven wire with cement along the lower side. Considerable grading and leveling have also been done. The improvements represent an outlay of \$4,000.

For several months workmen have been clearing the old North Side Burying Ground, Sag Harbor, Long Island, N. Y., of a thick growth of trees and underbrush. The paths have been graded and private hedges enclose the premises. All fallen gravestones have been straightened up and cleaned. Mrs. Russell Sage ordered the work done and will meet all expenses. The burying ground is one of the oldest near Sag Harbor, and was set aside by John Edwards, a great-grandfather of Mrs. Samuel L. Polley, in 1774. The oldest stone shows that the first burial was that of Mehittabell, daughter of the first settler, John Edwards, laid to rest June 7, 1774.

An ornamental iron fence on a concrete foundation, the gift of Mrs. W. J. Orendorff several months ago, has been erected along the entire front of Greenwood Cemetery, Canton, Ill. The fence is 573 feet long and has cost in the neighborhood of \$2,000. It is hoped that some benevolent friends will contribute for the provision of a good fence along the two sides of the cemetery.

The city council of Chanute, Kas., proposes to continue the road improve-



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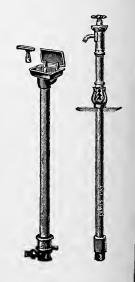
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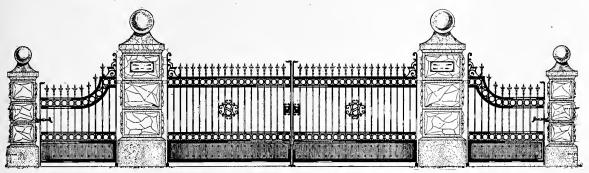


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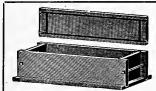
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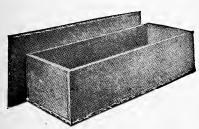


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Charles F. Young and Leonard Hauptfuier, partners under the name of the Canton Landscape & Gardening Co., were recently awarded the contract for the care of the lawns and drives at Monument Hill, Canton, O., for four months. The contract was awarded by a committee of the McKinley National Memorial Association.

Articles of incorporation have been drawn by the city attorney of Bemidji, Minn. This action is in accordance with a law which was passed by the legislature of 1911, and which provides that a corporation or association may manage a city's own cemetery.

CEMETERY REPORTS

The annual report of the Commissioners of Pine Grove Cemetery, Llynn, Mass., for the year ending December 19, 1910, shows the following among the receipts: Sale of lots, \$8,107.64; Interments, \$3,259; Foundations, \$1,917,51; Plants, \$1,734.35; Annual Care, \$891,38. Receipts from all other sources amounted to \$39,900.69. Among the expenditures were: Labor, \$26,680; salaries, \$3,958.48; Installation of new water system, \$1,814.32; loam and sod, \$1,-269.23. The Perpetual Care Fund is now \$227,085.22, and the Permanent Fund, \$4,018.75. There were 753 interments during the year, making the total number in the cemetery 24,945. It cost the cemetery \$1,104.46 for the year to continue the fight upon the gypsy and brown-tail moths. Many contemplated improvements had to be curtailed on account of lack of appropriations.

The annual meeting of the Woodlawn Cemetery Association, Winona, Minn., was held on June 12. A steady improvement was reported, and much work has been done on the roads, which will be continued as funds are available. Some 10,000 feet of ground was platted into lots, and vaults and monuments were erected to the amount of \$15,000.

The General Fund now amounts to \$40,-737 and the Permanent Care Fund to \$55,232.30. The latter fund provided an income of \$2,300 for the association last year. Among the receipts were: Sale of lots, \$3,963.50; labor and interments, \$2,394.88; Greenhouse, \$2,244.31. The principal expenditures were: For Cemetery, \$5,748.01; Greenhouse, \$2,114.02; Permanent Improvements, \$1,197.05

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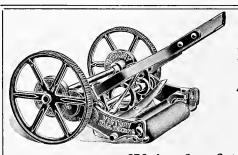
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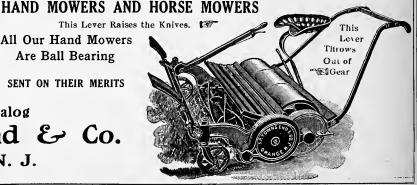
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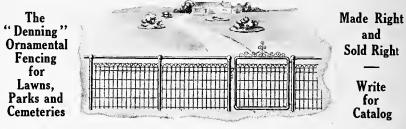
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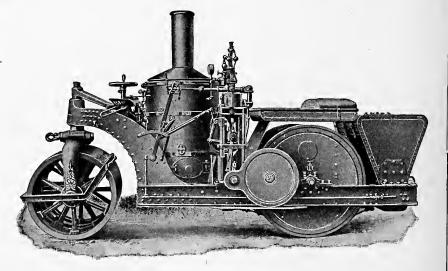


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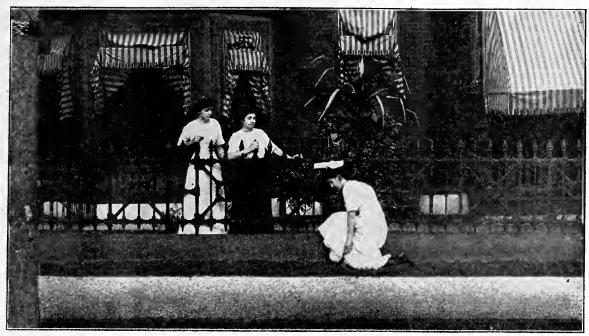
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AND LANDSCAPE GARDENING

Vol. XXI

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The Great Lincoln Monument, Washington, D. C.

The magnitude of the proposed Lincoln monument at Washington, D. C., entitles it to much consideration, and its progress will undoubtedly concentrate attention until its final accomplishment. The fact that Congress has appropriated the largest sum in its history for a monumental purpose also encourages the hope that it may be the grandest public monument so far erected in the United States, and that both in dignity and beauty it may express the art and refinement of the people in their memorial to the man whom multitudes consider to have been the greatest the country has produced. Conferences have been held, since the appropriation became law, between President Taft, members of the Lincoln Commission and the Commission of Fine Arts relative to the site, as well as the selection of the professional man to design the monument. In regard to the site, the Fine Arts Commission has endorsed the views of the 1901 Burnham Commission and has recommended Potomac park at a spot near the river bank, south of the Washington monument, and on the axis line of the Capitol and that memorial. Things have materially changed in very recent years in the matter of securing designs and the men to devise them. The militant forces for unfitness are now fairly vanquished and a new era for government art has dawned. No commission of politicians utterly ignorant of the first principles of art or beauty would now be tolerated. So it comes about that after due consideration the President and the Fine Arts Commission, on August 2, designated Henry Bacon, of New York, as the architect to design the Lincoln memorial. This is practically following the successful method of the English government in the creation of the recently unveiled Queen Victoria memorial in London, which was submitted entirely to the wisdom and artistic ability of now Sir Thomas Brock. This has resulted in probably the greatest of English public monuments.

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Drinking Fountains

"Old things are passing away, all things have become new," has many applications in these strenuous, but let us hope better, times. In the majority of our large cities, however, the question of humanity is yet a very lame one, and we see countless instances of cruelty to animals, especially horses, that, question it as we may, ranks us still low in the code of civilization. However, better times are coming, for a recent note in a New York daily says that "work on a drinking fountain in Trinity Churchyard, Broadway, was begun today," and it looks as though Father Knickerbocker himself has "woke up." Old Trinity with a drinking fountain! This is intended only for human kind, for a drinking fountain for horses and dogs had already been provided early this year on Trinity place by the donor of the more imposing one mentioned above, Mr. Henry C. Swords, one of the vestrymen of Trinity and a life-long member and communicant of the church. The fountain now under construction is located on the Broadway side of the church and was designed by Mr. Thos. Nash, architect. The style is late Fourteenth Century Gothic and it has been adopted from the crosses seen in English churchyards and at the crossroads in

rural England. It will stand fourteen feet high and be a handsome memorial to Anna Maria Cotheal Swords, the donor's mother. Incidentally the majority of our large cities are shamefully deficient in drinking fountains for both man and beast; and it is strange that it should be so, not only as viewed from the standpoint of civic necessity, but from that of their availability as memorials of almost any degree of beauty or cost. Gratitude would flow as free and as pure as the water from their faucets on the part of all benefiting from such examples of public and private civic thoughtfulness.

The Community Mausoleum

The legal troubles which appear to be revolving about the National Mausoleum Co. in its fight with the receiver appointed by the Ohio court will undoubtedly draw more thoughtful attention to the speculative features which have characterized the inception and progress of this corporation and its alliances. The fact that a cheaper method of disposing of the dead was offered, and that together with that proposition, an opportunity for investment under lucrative promises was held out to the general public, had a stimulating effect upon the minds of country investors, and the erection of quite a number of concrete mausoleums followed, scattered over widespread localities. From any standpoint it was a scheme involving a large share of temerity, for it was invading, even were it full of merit, a territory for ages dominated by established custom, a custom deep-rooted in the hearts of the great majority of the Anglo-Saxon people. But the commercialism of the age suggested that there was a good opening for speculative effort in the burial business, and the result is quite apparent. However, cemetery interests are rapidly awakening to the fact that a trespasser upon their long established rights has appeared and will act accordingly. We deem it hardly possible that community burial can take a very serious hold upon the minds of the people. It must deprive them of many of their most cherished ideas. There is a vast difference between the associations attending the private mausoleum and those connected with above-ground burial among absolute strangers. And the thoughts upon the processes of decay and putridity, which affection will tolerate for the sake of loving memories, will only be abhorrent, to a surpassing degree, when one's mind turns for a moment on the crowd of decomposing bodies in a community mausoleum. However, a number of cemeteries have permitted their erection on cemetery grounds, receiving therefor chapel privileges, the use of a certain number of the crypts, a share in the profits, or considerations of one kind or another. It is possible that the fear of their being erected outside the grounds in competition with the cemetery may have had its influence with some cemetery associations. It is certain, however, that community mausoleums should never be permitted in any cemetery without ample provision for perpetual care, and with the understanding also that their construction should be as perfect as possible, in view of the rapid deterioration to which such structures are liable. Incidentally it may be added that some time since a committee from Toronto, Canada, visited several cities in the States for the purpose of investigating this question, and upon their return reported adversely upon the proposition of permitting such mausoleums to be erected in their respective ceme-



THE KANSAS CITY PARKS



SCARRITT POINT COMMANDS MAGNIFICENT VIEWS.

There is no city in the country that can show a better record on park progress than Kansas City, Mo. It stands out prominently also as a city where a combination of circumstances, ethical and material, seemed to co-operate, with results eminently satisfactory; and even when opposition developed against particular propositions or details, it vanished into the public spirit which must have pervaded the body politic in its determination to secure a park system worthy of the ambitious city.

It was in the year 1893 that the then first board of park and boulevard commissioners reported a well considered plan, well considered in that it comprehended some years of careful study of local conditions and prospects. This plan appeared to be overwhelming to the community, and impossible of accomplishment in the judgment of many of the city's responsible and intelligent citizens.

In October, 1910, the board of park commissioners presented a report, purporting to be a detailed statement of the operations of the board for the fiscal year ending April 19, of that year, but containing also an account of the evolution of the system through what is practically a generation. A comparison of what was designed in 1893 and what has been accomplished since that year is simply astonishing.

In 1893 the design carried 9.85 miles of boulevards and 323.45 acres of parks; the longest boulevard was 3.4 miles and the largest park 154 acres. Since the above date there have been constructed a total mileage of improved pleasure drives, including boulevards, parkways and park drives amounting to 45.47 miles; and the park area is now some 2,118.25 acres, the largest tract being Swope Park, with 1,331.88 acres.

The first few years of growth were slow. Considerable opposition developed on the part of many large property owners, and legal obstacles were much in evidence; but in due time after the atmosphere had cleared and the legal basis became perfected, the actual work progressed rapidly. It is claimed, and not without wellgrounded reason, based on successful experience in other places, that "Kansas City has this comprehensive system today" as the result of "two methods of procedure adopted in the very beginning": First, the system was planned to embrace nearly the entire city as it existed seventeen years ago, and each feature was connected so far as practicable with the others.

"Second, the city was divided into park districts, each of which districts bore the burden of that part of the system within its limits."

While the extent of the system naturally frightened the heavy tax-payers, and even aroused their active antagonism at the very same time it awakened a keen interest in every element of the population. The fairness of the proposition in its well distributed plan stimulated public sentiment, which in a great measure served to allay the irritation of its opponents, and any general opposition was thereby weakened.

The Kansas City park and boulevard system is still a striking example of the results which follow a well digested plan, and it is quite remark-



OPERATING PLANT FOR WEST SIDE PARKS.



BEFORE AND AFTER VIEWS OF THE PASEO AT SIXTEENTH STREET, 1907 AND 1911.

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able that in spite of topographical difficulties, and these were particularly prominent in this case, the original design has been so closely adhered to. The difficulties of topography after all "afforded the basis upon which to form the city's diversified system of parks and boulevards." The principal adopted "in the very beginning was to follow nature as closely as possible, to adapt the planning to natural conditions."

Another particularly noticeable fact, and one which "points a moral," has been the change from early opposition to the great plan, to a later "The pronounced encouragement. greater part of the park area as it exists today cost nothing for land. Not only did popular sentiment grow with the development of the system as originally planned, but large property owners have aided by liberal gifts." To quote an instance from Mr. Kessler's, the landscape architect's contribution to the report: "To condemn the ground and remove the several hundred structures of Penn Valley Park cost nearly a million dollars. But when the people realized what was possible in Penn Valley Park a volunteer neighborhood movement to the southwest was started to transform a locality unsettled but similar in its ruggedness to Penn Valley. As a result of this volunteer action most of the ground was given by nearby property owners to create the beautiful Roanoke Park. A broken region in the midst of one of the most prominent residence sections was in danger of occupation by cheap houses and small industries. It is now a park, preserving and enhancing the character of the residence section surrounding it."

Especial care was taken in laying out the system of boulevards, inseparable as it must be from that of the parks, but the landscape architect

at the time of presenting the original plan said: "The chief objects sought in making this class of improvements are to fix for residence purposes the character of the districts through which the boulevards lead, and to present pleasant driveways leading from populous centers through proper surroundings to points of special interest. The boulevard routes selected meet these requirements very fully."

The names and areas in acres of the larger parks are as follows:

Penn Valley, 131.92; West Terrace, 33.41; North Terrace, 257.21; The Parade, 20.99; The Paseo, 94.58; The Grove, 10.49; Gilham Road, 124.65; Spring Valley, 27.33; Budd, 25.88; Roanoke, 36.04; and Swope Park, 1,-331.88. A number of small parks add to the total acreage. The question of an outer park belt has not been entirely overlooked, and it was while considering the matter some years ago that Col. Swope made his magnificent gift to the city, and this in itself is a capital start for the outer plan, for which, by the way, considerable investigation has been made. Nor has the small playground park question been neglected. No Kansas City boy has to take a street car ride to find a base ball field. Wherever "the system has penetrated well settled localities the policy has been to provide playgrounds for children, tennis courts and baseball diamonds for older youth." There is much to be done in fully equipping all the playgrounds, but every part of the city is cared for in this respect.

A recreation field is to be established in the East Bottoms, where numbers of industrial employes live. "There are playgrounds in West Terrace Park. The Paseo has its playgrounds. Where that chain of small parks widens into the twenty-one acres of The Parade is an athletic

field, a sunken portion of which becomes an out-door skating rink in winter. There is also the free bath house." Holmes Square is less than three acres in area but it has its free bath, its gymnastic apparatus, its sand court, its public fountain and its shelter. The development of this playground has changed the children "from little vandals into self-appointed guardians of the peace."

The standard for boulevard construction was recommended by the landscape architect and adopted by the first board of park commissioners in 1893. Results have endorsed the decision. The boulevards are 100 feet wide, the space divided as follows on all routes not occupied by street railways: A central roadway 40 feet wide and parking 30 feet on each side. The park is arranged with a curb and gutter combined; next to this turf 17 feet wide, then 8 feet of walk, and 5 feet between the latter and the property line. On the parking space three lines of trees, almost equally spaced, are planted. In the event of the roadways having to be widened a strip can be taken from the parking on each side of the roadway, even to removing the trees next to the curb without interfering seriously with the boulevard plan.

Perhaps no city in the country has more clearly demonstrated the fact of the increase in property values which follows the development of a well devised park and boulevard system. It is always freely used as an argument in favor of taxes and expenditures for park purpose, but does not always exercise the influence it should be expected to do, and. for one reason, because beneficial park development is often slow and covers long periods. In Kansas City, less than a generation has elapsed since the park plan was actively inaugurated and the following statistics will

surprise and interest many readers: The information is taken from the Park Report just off the press: The assessed land valuation in the North and South Park districts in 1898 was \$18,421,000; in 1910 the valuation was \$31.282,130. A natural land gain in the two districts of 69.82 per cent. The Benton Boulevard assessed land valuations in 1898 amounted to \$131,-415; in 1910 it was \$372,690, a land gain of 183.60 per cent. Deducting for cost of frontage improvements on 1898 land values, the net gain due to boulevard establishment has been 43.78 per cent.

The beauty of Kansas City's parks and boulevards may be readily appreciated from the illustrations given herewith. The cover picture is a view in Penn Valley Park, giving a vista of the city and its sky line over the lake. This park is located in the West Park district. The two illustrations of the Paseo, before and after, at Sixteenth street, are interesting as showing an entire transfor-

mation. The Paseo is a splendid boulevard running almost centrally through the city from north to south and which is broken occasionally into small parks and beauty spots. Scarritt Point from Prospect Point, North Terrace Park, is a fascinating scene and explains some of the charm of the park system in its remarkable diversity. One might hardly expect to find such a view as a part of the park development of a city of just under 250,000 population. North Terrace Park is located, for the greater part, in the North Park district and running over a little into the East. Its 257 acres extend east to west almost parallel with the Missouri river. A plan of this park is given herewith, upon which may be found its charming Cliff Road, skirted by the fine Independence boulevard. This park is remarkable in its topography, and the views over the Missouri river valley and the rugged scenery of the locality make it a pleasure ground of immense practical value and attractiveness. Commanding some of the beautiful and extensive vistas, residence properties of the highest class abut upon its unmarked boundaries, creating a district almost unique in park work.

There are approximately 50 miles of oiled roads which have given satisfaction. An excellent subsoil covered with hard limestone macadam is coated once or twice a year with a heavy paraffin oil residuum mixed with asphaltum and with good results. The oil costs one and a half cents per gallon and is handled entirely by gravity.

The total cost of the system has been, according to the latest report, \$10,372,876.67. It is hardly necessary to say that all connected with the inception and development of Kansas City's park system, not to omit Mr. George E. Kessler, the landscape architect, are to be sincerely congratulated on the beneficent results of their labors.

AMERICAN ASSOCIATION of PARK SUPERINTENDENTS

Thirteenth Annual Convention, Kansas City, August 8-10

The Thirteenth Annual Convention of the American Association of Park Superintendents held at Kansas City, Mo., August 8, 9, and 10, 1911, will take its place in the annals of the organization as one of the most successful meetings the association has yet held. Twenty-two states, the District of Columbia, Manitoba and Ontario were represented by approximately seventy-five superintendents, officers and commissioners, many of whom were accompanied by their wives. Headquarters was at the Hotel Baltimore. The opening session was held at the offices of the Kansas City Board of Park Commissioners, where Mayor Darius A. Brown and Henry D. Ashley, member of the Board of Park Commissioners extended the visitors a cordial welcome to the city. Vice-President Charles E. Keith, of Bridgeport, Conn., presided in the absence of President Wm. J. Zartmann, Brooklyn, N. Y., who was unable to be present, and responded to the hearty greeting. Mr. Keith referred sympathetically to the absence of W. H. Dunn, general superintendent of the Kansas City parks, and a vice-president of this organization, who was detained at home by sickness. President Zartmann's annual address was read by Mr. J. B. Shea, of Boston, Mass. It said in part:

"The development of parks and other recreation grounds throughout the country has far outstripped the growth of population, and appears to be still increasing. It is likewise more and more realized that the trained man accomplishes more and far better work than the mere novice or gardener.

It appears to me that the Association by getting in touch with all those who contemplate the creation of parks, have them in course of construction or already in use, cannot only materially increase its membership and influence, but be of considerable assistance to those that need help."

Mr. Zartmann referred to the importance of securing "a medium for the exchange of our thoughts and experiences and for the imparting of advice and instruction." He said the Bulletin had failed in its purpose and advised making "some one of the technical periodicals the official organ of the association." He expressed his regret at being unable to take part in the deliberations of the convention and said "circumstances over which I have no control make it mandatory for me to remain in New York."

Secretary-Treasurer F. L. Mulford reported among other activities of his office during the past year was the mailing of circular letters and Bulletins to several hundred persons interested in park and similar work, soliciting active, associate and special memberships. Among the two latter classes were the Association of American Cemetery Superintendents; the Railway Gardeners Association and the American Society of Landscape Architects.

The membership, including active, honorary, associate and special members, was 134 to which a number were added during the Kansas City meeting.

"Uniform Park Accounts and Reports and the National Census Bureau" was discussed by Dr. Ernst C. Meyer, expert special agent of the Census Bureau, Washington, D. C., and supplemented by a pamphlet prepared by L. G. Powers, chief statistician in charge of statistics of cities in which standard forms for uniform reports of the financial transactions of parks were suggested. The general adoption of such forms would greatly expedite the work of the Department of Commerce and Labor in compiling this interesting information. Copies of the pamphlet may be had on request to the above department.

G. A. Parker, Th. Wirth and F. L. Mulford were appointed a committee to act on Dr. Meyers suggestions.



PARK SUPERINTENDENTS IN CONVENTION AT KANSAS CITY.

A paper on "Street Trees," prepared by J. J. Levison, Forester City Parks, Brooklyn, N. Y., was read by Mr.: Mulford, Mr. Levison said "The old neglected street trees are now gradually becoming the park superintendent's care and he must prepare to meet this new problem." Street trees, as well as park trees, he felt should be controlled by the municipality and placed under the jurisdiction of a single head. Combining all city tree work under one head is the only way of securing uniformity of planting and of controlling insect and fungus invasions over large areas and of doing anything systematically and at the right time. Mr. Levison's address will be published in the next issue of PARK AND CEMETERY.

Dr. Frank Baker, Superintendent Zoological Park, Washington, D. C., addressed the meeting on the subject: "Architecture of Animal Buildings," and exhibited photographs of a large number of good and bad examples of such buildings in this country and abroad.

In the evening the Commercial Club of Kansas City tendered a complimentary dinner to the association at the Hotel Baltimore. The speakers were J. C. Lester, president of the Commercial Club; Hon. Darius A. Brown, Mayor, and Henry D. Ashley, of the Park Board, who sopke on "Parks Are To Cities What Lungs Are to Men." Mr. Ashley said in part:

Parks are to cities what lungs are to men, that is to say, breathing places. And

you, gentlemen, are the architects andceives the best service of which each of builders of these most important organs—you is capable. Your financial reward of the body politic.—are no doubt small, but the joy of t

Upon you, the park superintendents of American cities, rests a large responsibility. The importance of your work cannot be over-estimated, and such work for the benefit of all the people seems to me far more interesting than mere commercial pursuits, even though the financial returns are probably in most cases very meager.

August R. Meyer, the father of our Park and Boulevard System, is the only man for whom Kansas City has erected a public memorial, which you have already seen in the Paseo. On the reverse side of the memorial is written:

"Houses and shops are man's, But grass and trees and flowers Are God's own handiwork, Undaunted this man planned and toiled, That dwellers in this place Might ever freely taste, the Sweet delights of nature."

This same August Meyer in his farseeing and prophetic report on Parks and Boulevards made in 1893, nearly twenty years ago, and which has been the guide to all of our efforts since, said:

"To make the most of life is the highest duty of the individual, and to permit and advance its fullest development and enjoyment is clearly the first and greatest duty of every municipal corporation towards its citizens. Life in cities is an unnatural life. It has a tendency to stunt physical and moral growth. The monotony of brick and stone, of dust and dirt, the absence of the colors with which nature paints, the lack of a breath of fresh air, write despair on many a face and engrave it on many a heart."

Now, gentlemen, yours is the noble task, among the brick and stone, and dirt and dust, to paint with nature's color and supply for the free use of all the people, the breathing spots where despairing faces brighten and weary hearts and bodies seek and obtain recreation.

This work demands and doubtless re-

you is capable. Your financial rewards are no doubt small, but the joy of this work and the direct beneficence of the results, is its own best reward, nor can the best results be obtained unless the service of men with enthusiasm for their work can be secured.

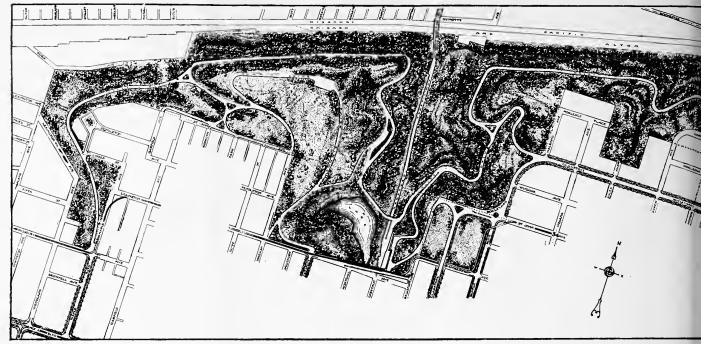
If I were to venture any word of advice to this distinguished body it would be this: If you love this work, stick to it; and try to inoculate with your enthusiasm every man connected with the work. If you don't love the work, quit it at once. Only by such genuine enthusiasm, in my opinion, can the vis inertia, to which all governmental work seems inevitably prone, be to any extent overcome.

It is certainly true as stated in our Park Report for the current year, that the courage and enthusiasm of August R. Meyer still exerts a powerful influence for good on the Kansas City Park Department.

To attain intelligent, efficient and economical construction and maintenance something more than perfunctory work must in some manner be secured from every one connected with the Department, from the president to the man who cuts the grass or waters the trees, and this useless perfunctory work is work without joy, and with the ear keenly alert for the quitting bell.

The charm of work lies in the fact of its direct beneficence to all classes of people. To the children who frolic under the trees and paddle in the wading pools, and to the old men, who, having reached the allotted span of three score and ten, have dropped out of the mad struggle after dollars, but have learned from Robert Louis Stevenson or somewhere else, that playthings after all are the very pick of life, and still play croquet with the zest of boys, as you can see them doing any summer afternoon in our own Grove.

As to what has been accomplished here in Kansas City in the way of parks and boulevards I have only this to say: We



are realizing every day more keenly the value of a far-seeing and comprehensive plan before the work begins. In other words, bravely lay out a broad plan in view of a reasonably anticipated growth and then work steadily to it. Have two distinct treatments. For the back bone or central paseo of your park system, an absolutely formal treatment; for all outlying parkways and boulevards, leave Dame Nature religiously alone, even refraining from formal curb and gutter and building perfect roadways along natural lines, avoiding rectangular treatment.

Our Cliff Drive, I think, may be said to be a noble example of this latter. Dame Nature put the limestone ledge about half way down the river cliff. The treatment is simple and inexpensive. Granitoid sidewalks, curb and gutter would almost have ruined it, killing that delicious impression that one is in the woods in their native state, far from the congested city, although really in its midst. For the shelter houses and the bath houses and architectural adornment cling to simple lines. Avoid flamboyancy and jimcrack, and let all construction be simple and substantial. The life, growth and development of cities alas, is generally like the growth of individuals, the result of chance and environment.

Washington is about the only American city deliberately laid out beforehand. Every city should dream and plan for the future with a definite ideal in view, even though unattainable within the lives of the present generation. Its citizens, young and old, having seen this vision of a more beautiful, cleaner and better city should focus their efforts through some central organization, and then ever give some portion of their thought and labors to the city of their choice.

Civic pride is the greatest asset of a growing city and the municipal life of most cities is affected and directed not by its politicians and orators but by the sincere enthusiasm and loving labors of its private citzens who want no office, but love their city next only to their homes and are glad to give to it some of their thought and labor.

A motor car ride by moonlight over a portion of the boulevard system was a pleasant diversion terminating at Electric Park where vaudeville was enjoyed.

Boston was chosen for the 1912 meeting, with several invitations already entered for 1913 and 1914. The opinion seems to prevail that the meetings should alternate between the east and the west. The following officers were elected for the ensuing year: President, W. H. Dunn, Kansas City, Mo.; Vice-Presidents, C. E. Keith, Bridgeport, Conn., J. B. Shea, Boston, Mass., F. C. Green, Providence, R. I., J. W. Thompson, Seattle Mr. W. R. Adams, Omaha, Neb., G. Champion, Winnipeg, Man.; Sec'y.-Treas., F. L. Mulford, Washington, D. C.

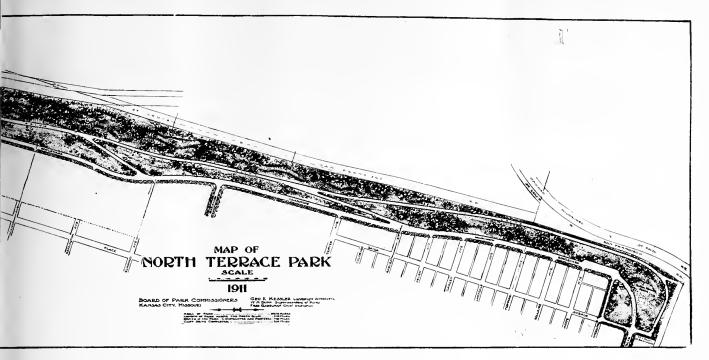
A communication was read from J. W. Thompson, Seattle, Wash., suggesting the admission to membership of secretaries, engineers, acting engineers, etc., and recommending changing the name of the organization to American Park Association. An animated discussion followed without any action resulting.

A motor car ride across the intercity viaduct to Kansas City, Kansas, the metropolis of the sun-flower state, gave the visitors a hasty glance of at least a part of this enterprising city. As the motor cars entered the state the occupants of the cars were given a bunch of the Kansas state flower.

Luncheon was served under the trees in Budd Park, a wooded tract of 22 acres, the city's first park and in which there are no driveways. Here

Mr. W. H. Dunn, accompanied by his physician, was able to spend a short time with his friends. In a brief speech he expressed his gratitude at having been honored by his election to the presidency of the association, and also his regrets at his inability to participate in all the activities of the convention. Mr. Dunn's illness was caused by a severe attack of rheumatism. The afternoon was devoted to motoring over Kansas City's justly famous park and boulevard system. Between sixty and seventy miles were covered. Dinner was served in the refectory in Swope Park as guests of the Board of Park Commissioners, during which the park band furnished vocal and instrumental music. This was followed by a stereopticon lecture on the park system of Kansas City by Mr. Geo. E. Kessler, landscape architect. Many of the pictures illustrated scenes showing actual conditions before and after improvements were made, on much of the ground that had been traversed during the afternoon, adding greatly to the value of the lecture for as Mr. Kessler said such things are possible in every city of any size in this country. Several vaudeville numbers concluded the evening's entertainment. and an electric car ride of seven miles to Hotel Baltimore rounded out a somewhat strenuous day.

The closing day of the convention included business sessions in the morning and afternoon with another delightful motor ride to points of interest. Several of the new playgrounds were visited. At Holmes Square, the first and most complete-



ly equipped, situated within a very few squares of the business district, Miss Elenore K. Canny, Supervisor of Playgrounds, had a class of little girls dance and sing. From 500 to 600 children come here daily. Excellent results are seen in the physical and moral conditions of the people in this district and the fifteen playgrounds planned for the system will demonstrate the wisdom of the investment in this direction as it has in the general park and boulevard system of the city.

James B. Shea read a paper on "Road Construction," which he prefaced with some complimentary remarks regarding the excellence of the method of road making in the South Parks and Lincoln Park, Chicago. Mr. Shea's paper told of the progress made in road building in Massachusetts, where there are now one thousand miles of state highways and as many more in contemplation. The Massachusetts Highway Commission has expended \$7,000,000.

The ravages being made on trees by insect pests were informally discussed. Mr. Merkl, of Bronx Park, New York, who was to have had a paper on the subject, was not present.

After luncheon at the refectory in Swope Park, the closing session was held on the lawn under the trees where a variety of subjects were discussed and appropriate resolutions adopted expressing the gratitude of the Association to Commissioners John W. Wagner and Henry D. Ashley and all others who had contributed to the pleasure of the visitors during their long-to-be-remembered stay

in Kansas City. Sid J. Hare, landscape architect of the Kansas City, Kans., park system, was called upon and gave a brief description of the progress that was being made in park improvements in that city.

The following is a list of new mempers admitted at the Kansas City meeting:

Active - Alexander Fiske, Supt. of Parks, Racine, Wis.; John F. Walsh, head gardener Bronx Park, Brooklyn, N. Y.; Richard Iwerson, Supt. of Parks, Saskatchewan; N. F. Keith, Supt. of Parks, Joplin. Mo.; Samuel Wood, Supt. of Parks, Cedar Rapids, Ia.; W. R. Teitze, Supt. of Parks, Dallas, Tex.; V. Grant Forrer, Supt. of Parks, Harrisburg, Pa.; Frederick C. Steinhauser, Gen. Supt. of Parks, Denver, Col.; Lionel Evans, Supt. of Parks, Youngstown, Ohio; Adam Kohankie, Supt. Washington Park, Denver, Col.; Nicholas Byhower, Supt. of Parks, Salt Lake City, Utah; C. C. Cox, Supt. of Parks, Wichita, Kan.; Dan'l E. Bushnell, Chattanooga, Tenn.; Edward McCracken, Supt. and Engnr. Park District East St. Louis, Ill.; Fred Gabelman, Chief Draftsman, Kansas City, Mo.; A. C. Graham, Acting Supt. of Parks, Council Bluffs, Ia.; A. H. Gillis, Supt. of Parks, Kansas City, Kan.; T. T. Barnes, Asst. Supt. of Parks, Harrisburg, Pa.; P. W. Thomas, Supt. of Parks, Memphis, Tenn.; Ralph P. Benedict, engineer of construction, Kansas City, Mo.; Herbert Greensmith, Supt. of Maintenance, Cincinnati, Ohio; M. C. Longenecker, Acting Supt., Cincinnati, Ohio.

Associate—L. P. Jenson, Busch Place, St. Louis, Mo.; Roland Cottrell, Sec'y Park Board, Seattle, Wash.; W. R. Linscott, Supt. Country Club District, Kansas City, Mo.; H. F. Major, Supt. University Grounds, Columbus, Mo.

Special—Mr. Higgins, Commissioner of Parks, Borough of Bronx, New York City; Rome Miller, Pres. Park Commission, Omaha, Neb.; F. L. Olmsted, Jr., Brookline, Mass.; Sid J. Hare, Kansas City, Mo.; H. G. McGee, Park Commissioner, Council Bluffs, Ia.; Frank Peterson, Park Commissioner, Council Bluffs, Ia.; Ch. Guengerich, Pres. Park Board, Joplin, Mo.

Honorary — Jackson Dawson, Supt. Arnold Arboretum, Boston, Mass.

Messrs. John W. Wagner and Henry D. Ashley, members of the Board of Park Commissioners, were most hospitable in their entertainment, and the citizens responded very generously to the call for automobiles for the use of the visitors. The office staff of the Park Board, F. P. Gossard, secretary; E. J. Balsiger, accountant; Fred Goldman, chief draftsman; S. W. Benedict, assistant engineer, and Ralph R. Benedict, engineer of construction, were assisted by Messrs. A. and J. Van Brunt and Ben J. Lubschez in looking after the welfare of the visitors. Even the weather bureau did what it could to add warmth to the cordial treatment everywhere received; the mercury registered the highest August temperature in many years, 104 degrees, on the afternoon of the 9th.

The daily press was generous in its attention and published numerous interviews reciting the favorable comments heard on all sides regarding the Kansas City parks and boulevards.

LORADO TAFT'S TROTTER MEMORIAL FOUNTAIN

Lorado Taft's Fountain of the Great Lakes, the first commission to be given under the Ferguson bequest for public sculpture in Chicago, demonstrated to a degree not hitherto attained in America the possibilities of ideal sculptural expression in fountain memorials.

Mr. Taft's Trotter memorial fountain, lately unveiled in Bloomington, Ill., is in a smaller way, another ex-

ample of his mastery of the decorative use of sculpture in the art of the public fountain.

The Trotter memorial was erected with a fund of \$6,000 left for that purpose in the will of James Trotter, the last survivor of a family, well-known in Bloomington's business affairs a quarter of a century ago. Mrs. Sarah Raymond Fitzwilliam, the executrix of the will, was in charge of

the erection of the fountain, and contracted with Mr. Taft for the sculpture.

The fountain stands about 15 feet above the ground. Its length is 9 feet 4 inches, its width 6 feet and each of the standing figures is 6 feet 8 inches.

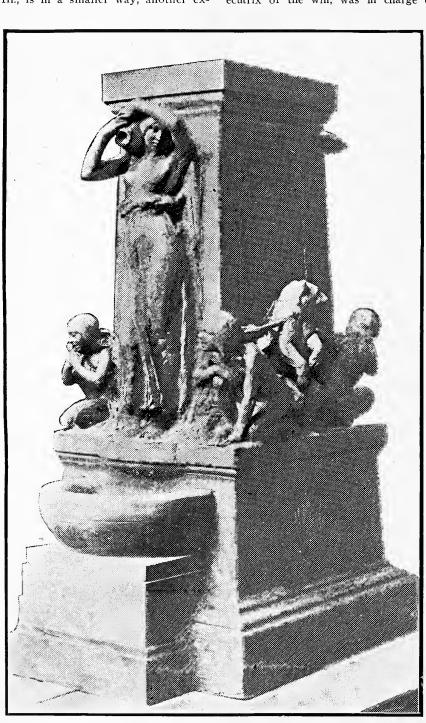
The fountain is constructed of Georgia marble. The base is a massive stone of rectangular shape, upon which a smaller shaft arises. Surrounding the upper portion of the stone are groups of sculptured figures which form the artistic feature of the whole work. The inscription and Trotter coat of arms are carved upon the base in bas-relief. The crest of the coat of arms is a trotting horse, symbolical of the family name.

The sculptures surrounding the upright stone of the fountain are studied with the most interest. There are eight separate figures all grouped in such way as to bring out the allegorical character of the fountain. Three different phases of life are depicted in the sculptures, all connected in some way either with the site of the fountain, the purpose of its donors or the ideas it would perpetuate. These phases are:

Child life; animal life; pioneer life. Child life is brought to mind by the fact that the site of the fountain is a children's play ground. Animal life is inseparably connected with happy childhood. Pioneer life is typical alike of the family which donated the memorial and of the times which are passing away, but which will be kept in mind by such memorials as this.

At each end of the fountain stands an Indian maiden, who pours from an urn upon her shoulder the water which falls into a basin attached to the base. At her feet in the prairie grass is a playful Indian child. These end groups are united by an animal at each side of the fountain. On one side is an Indian dog, on the other a tame bear cub. The children, lying in a half-reclining pose, look up into the face of the Indian maiden. The animals harmonize well with the other figures of the group.

As the interior of the stone is hollowed out for the accommodation of the plumbing Mr. Taft has suggested that a vessel be imbedded at the top of the stone and therein earth be placed for the growing of some ornamental plant or trailing vine which will form a pleasing and appropriate decoration.



TROTTER MEMORIAL FOUNTAIN, BLOOMINGTON, ILL. Lorado Taft, Sc.



Much disappointment was felt in the city of Madison, Wis., over the defeat in the assembly of the joint constitutional amendment resolution which provided that the state might bond itself to the extent of 1 per cent of its assessed valuation for internal improvements. It had already passed one legislature, and had it passed this it would, in November, 1912, have been submitted at the general election for a referendum vote of the people. A great capitol park was to result from this fund to extend from Lake Mendota to Lake Monona.

The lack of public comfort stations, and the neglect in the care and maintenance of certain of the parks of Syracuse, N. Y., is developing considerable complaint on the part of the public in that city.

The authorities of the Worcester Art Museum, Worcester, Mass., have offered to give to the city three tracts of land, on condition that they shall be used for park purposes only, under the direction of the park commission, that no buildings shall be erected on any portion of the tracts unless they are for public purposes, that certain land of the museum shall forever be free from betterment assessments. Other minor stipulations are also named, but the offer has been taken under advisement.

The approval of the Senate committee on public buildings and grounds of the Wetmore bill for the purchase of the valley of Rock creek as an addition to the park system of the National Capital has been reported to the Senate. Several urgent reasons for the purchase of the land were set forth in the committee report made by Senator Wetmore. He pointed out that it will prevent the further pollution of Rock creek, will afford proper facilities for the Botanic Garden in place of the present absurdly "inadequate" facilities, and is important in connecting Potomac and Rock Creek parks.

The District Commissioners of Washington, D. C., recently transmitted to the Senate the draft of a bill authorizing the condemnation of Klingle Ford Valley. This is the largest piece of ground to be asked for park purposes since the acquisition of Rock Creek Park.

At Grant, Mich., the proposition to

bond Grant for the purpose of buying Blanch-Lake park carried by 10 to 1.

Battle Creek, Mich., is to have a fifty acre public park, which will include a donation of some 12 acres.

Chickasha, Okla., is preparing to acquire a city park system.

Consul General David F. Wilber reports that Park Commissioners Owen, Eldon, and Nelson, of Vancouver, British Columbia, have been appointed a committee for the local park board to look into the general question of oiling and watering the roads through Vancouver's large natural park, Stanley Park, which has many miles of roadways through its scenic extent.

After a long delay, extending over some 6 months, the Commission at San Francisco has at last selected the site for the Panama-Pacific-International exposition to be held in 1915. The larger part of the exposition grounds will be included in the western part of Golden Gate Park. The most of the large, permanent buildings are also to be constructed in the Park grounds. The site is a beautiful one.

The Women's Co-operative Civic League of Baraboo, Wis., has been, after much effort on the part of its devotees, successfully launched. It is expressly an organization to create a beautiful Baraboo, and from the enthusiasm evident in its inauguration incidents, if it follows in the wake of other real working oganizations in the good cause, it will unquestionably be successful. Baraboo is a beautiful little city to begin with, which is quite a part of the battle. We note that the credit for the successful issue of this effort is accorded to Mrs. Alfred T. Ringling. The first field of activity to be cared for is that of the cemeteries, which adjoin, and the street leading to them, and the League proposes to lose no time in settling down to work.

A report favoring the purchase of the Rockaway beach site for a public park was presented last month to the Board of Estimate of New York City, by a committee of the Parks and Playgrounds association through Jacob A. Riis. The committee calls attention to the fact that the city has to pay at the rate of \$1,000,000 a block for playgrounds in congested districts and warns the board that the present opportunities for seaside parks are about the last.

A city park Commission is in course of organization for Richmond, Calif.

The first steps for the purchase of the lake front property for park purposes, the piece of land recently acquired by Frederick Osius, at a rumored price of \$15,000, were made recently by the city council of Racine, Wis., when the park board was allowed \$10,000 on such purchase, with the understanding that it raise the necessary complement.

The new sylvan playground of Kalispell, Mont., has been officially christened "Woodland Park." Much progress has been made in improving its forty acres.

At a recent meeting of the city council of Walla Walla, Wash., it was decided that the city should take over Dreamland park for \$9,500, complying with requests of the Woman's Park club. The club purchased it and paid \$500, but was unable to continue payments.

Chattanooga, Tenn., has begun the task of enlarging and bettering its park system, and an improvement era is in evidence.

Final steps are being taken by the chamber of commerce in Amarillo, Texas, joined by practically the entire Panhandle, to present to congress photographs and data setting forth the fitness of the Palo Duro Canyon for a national park.

According to a report recently made to the Los Angeles, Calif., park commission by Commissioner J. B. Lippincott, recently returned from an Eastern trip for the study of park matters, Los Angeles is suffering from inadequate laws governing the maintenance and extension of its park system. He says Los Angeles has the poorest park laws and the least improved parks of any known American city of equal size, and she has no boulevards at all.

William P. Bancroft, president of the Park Commission of Wilmington, Del., who has made frequent donations in the past for various public purposes has donated to the city \$1,000 to be deposited in the fund for the purchase and improvement of park lands.

After several protests from the residents in the vicinity of Degollado Plaza, Monterey, Mexico, against the proposed establishment of a market on the square it has been decided to turn the place into a public park with a

bandstand and fountains. In order to do so the immense fountain and statues now standing will be removed.

The Board of Park Commissioners of Wilmington, Del., has been allowed \$15,000 by City Council on account of the special fund for park purposes. This is the first money Council has voted to the Park Board out of the receipts of the recent bond issue for parks. The resolution provides that the money shall be used to make improvements to park lands. This prevents the commission from acquiring new lands.

A statement of the condition of The Vicksburg National Military Park to June 30, has recently been issued from the Commissioner's office at Vicksburg, Miss. Among the chief items are: Area, 1,323.78 acres; cost per acre, \$46,624: Miles of finished roadway, 30.37; cost per mile, \$13,313.24; number of bridges, 16; cost, \$116,449; number of guns mounted by United States, 128; 66 Union, 62 confederate: number of tablets by United States, 897; 31 bronze, 866 iron; 568 Union, 329 Confederate; number of iron guideboards, 122, Number of memorials by United States, 22; 1 for Union Navy, 4 portrait busts (2 Union, 2 Confederate), 17 portrait tablets (11 Union, 6 Confederate); cost, \$157,928.93. A memorial for Confederate Navy is desired, at approved site, to cost not to exceed \$125,000. Number of memorials, monuments, and markers, by States, in place, 424; 400 Union, 24 Confederate: Number of monuments, and markers, as gifts, in place, 22; 5 Union, 17 Confederate; cost, \$4,257.50: Number of bronze portraits as gifts, in place or under contract, 21; 4 statues, 1 bust, 16 tablets; cost \$57,084.85. Number of bronze portraits, as gifts, assured, 9; 2 equestrian statues, 1 bust, 6 tablets. Appropriations by United States, \$1,219,000, including \$150,000 for construction of Union Navy memorial: cost of this memorial, \$144,041, leaving an unexpended balance of \$5,959. Authority of Congress is desired to use this unexpended sum (\$5,959) for bronze portraits of brigade and division commanders, Union and Confederate, engaged in the operations commemorated. Missouri has appropriated \$50,000 for the park; amount heretofore reported, \$797,000; total, \$847,000, by 15 States.

Enterprising citizens and the members of the Women's Improvement Club of Vallejo, Calif., have started an agitation for the laying out of another public park in the eastern end of town, and also for the establishment of a ladies' rest room under the Carnegie Library. The park would cost about \$7,500, and of this sum the Improvement Club ladies are willing to donate one-third of the amount necessary.

The City Plan and Improvement League of Dallas, Texas, have begun active work on the development of the proposed parkway along Turtle Creek, as suggested in the Kessler plans.

George Vinnedge, superintendent of city parks, San Antonio, Texas, has prepared plans for a lake in Sycamore park. He proposes to secure this lake by building a dam across Sycamore creek, and is now drawing specifications for this work which will begin soon. The lake will be about one-third of a mile in length and more than eighty feet wide.

The north and south entrances into Washington park, Milwaukee, are being widened and improved. The two-story building standing on Sherman boulevard, on the north side, has been removed and the wide boulevard now will run directly into the park. At the south end of this triangle the Baron Steuben monument will be erected.

The work of preparing the site of the Maine Memorial, to be erected at Columbus Circle, Central Park, New York City, has made a noticeable change in the view of the Park from the Broadway cars and the sidewalks. Four large trees have been cut down from the centre of the site, and the circular rest-house has been removed. The result is that a long sweep of the Park lawn and trees meets the eye of the passer where were formerly the trees and the wooden house.

The triangle near the Illinois Central depot, Pekin, Ill., which has been used as a storage and dumping ground is being cleared up by the Park board which will convert the spot into a public park.

The Webb Pink Granite Co., of Milford, Mass., has been awarded the contract to furnish the granite for a handsome band stand, to be erected in Boston from the Parkman fund. The granite to be used in the structure is to cost close to \$15,000, and when finished is to be a very ornate affair.

The Hudson County Park Commissioners, Jersey City, N. J., recently awarded contracts for the buildings that are to put the finishing touches

on West Hudson Park. The contracts call for the building of a rustic outlook and a rustic bridge over the lake. A big main outlook is to be constructed on one of the knolls in the park. On the field set aside for games a spacious grandstand is to be erected and on the edge of the lake a boat-house, up-to-date in every particular, will be built for the accommodation of at least 100 boats. The successful bidder was William Robertson & Son, of Jersey City. The contract is for \$21,469, and the buildings will be completed within two months.

The H. C. Frick Coke Co. have put some men at work to make a park at Standard, Pa. The site of the new park is between the State road and Shupe's Run. A number of double houses have been cleared away, and the company has made an appropriation of \$31,000 for the work. It will be a great improvement.

The late Illinois legislature made an appropriation of \$5,000 for a state park on the site of old Fort Chartres, near Prairie du Rocher, 50 miles south of St. Louis and between the Mississippi and Kaskaskia rivers. In seven years the old fort will be 200 years old, it having been first built in 1718. In 1778 it was captured from the English by Gen. George Rogers Clark.

Wylie Park, the latest addition to the park system of Aberdeen, S. D., was opened on July 4. The tract of land, consisting of 160 acres, possesses great natural beauty.

Lee Happ of Macon, Ga., has offered to present to the Tatnall Square playground, of that city, a sanitary drinking fountain. It was much needed and the gift has been accepted.

The plans of the Olmsted brothers, Boston, Mass., for the improvement of Fairmount Park under the bond issue of November last have been practically accepted by the Board of Park Commissioners, Riverside, Calif.

Public-spirited citizens of Bonham, Texas, have raised money by subscription and purchased a tract of land in north part of town. At a recent meeting of the City Council it was donated to the city to be made a City Park.

The town of Marble Rock, Ia., has accepted the offer of E. H. Shepardson, who on payment of \$100 per acre, has deeded ten acres of land which he purchased a few days ago for park purposes at \$200 per acre. The park is well wooded and has a fine stream running through it.

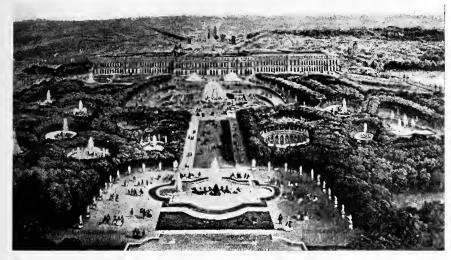
(Continued on page VIII)



HISTORY and GROWTH of LANDSCAPE ARCHITECTURE

A Definition and a Brief Resume of Its Past and Present; Presented Before the Congress of Technology, by Stephen Child, Landscape Architect and Consulting Engineer, of Boston and Santa Barbara, Calif.

III.—English, French and American Design



THE GROUNDS AND PALACE OF VERSAILLES. Note the predominance of gravel paths in the design.

As we go forward with the years we may follow the development in the landscape design of France and England, both countries feeling to a more or less degree the influence of the Italian renaissance. France even more than England. In the latter country more evidence of mediaeval influence and motives are to be noted. In the Italian villa and its grounds we have a single and very highly developed unit of rather limited size larger than the mediaeval unit to be sure, but still domestic in its scale. In France, while this Italian influence is noted at first, it soon spread to a much more vast conception. The motives of the great French landscape designers were the wealth and power of their nobility and their desire to express these two things in the surroundings of their palaces and chateaux by the extent of their finished grounds. They deviated from the Mediaeval and Italian designs by adding unit after unit.

The topography being quite generally nearly level, all things were adapted to this. Terraces became broader, greater areas of water were employed and the development of the chateau appeared.

Here we have the mediaeval idea of the moat seized upon formalized and elaborated to a great extent as at Fontainbleau and Chantilly. The highly organized axial arrangement of the Italian school was retained in the French designs but the scale of everything was immensely enhanced. It became no longer domestic or human but superhuman, especially in the time of Louis XIV, the self-styled Grand Monarch

who firmly believed he was something more than human.

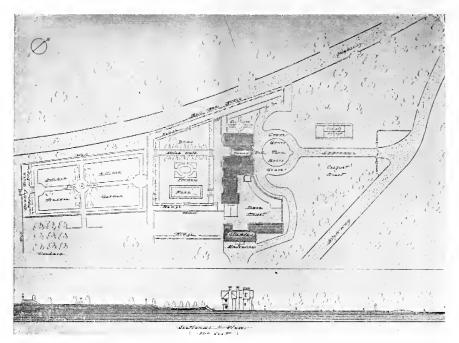
He had LeNotre and Mansard design Versailles and Chantilly with these motives in mind. In these estates there was a greatness and a strong and simple relation of parts one to another. The scale is always colossal and the emphasis is rightly enough under the circumstances placed not upon convenience but almost wholly upon appearance. The purpose was to express magnificance and was for effect wholly, and the results, while grand and impressive, are not as exquisitely interesting as in some of the Italian work.

Relatively little of this grand but superhuman style spread elsewhere, although it is somewhat in evidence at Hampton Court in England and Schoenbrunn near Vienna, and Wilhelmshohe are respectively Austrian and German examples of this influence. This influence of LeNotre's style is evident not only in the later work of Haussman and Alphand and Andre at Paris, but to a certain degree of L'Enfant in his plans for the city of Washington.

English landscape design was as a rule more human, more influenced by mediaeval motives, and there was less emphasis placed upon the strictest axial



GROUNDS OF HAMPTON COURT IN ENGLAND.



PLAN OF BRICKWALL HOUSE AND GROUNDS, ENGLAND. Note the mediaeval influences, the fitting of existing conditions and the more or less disregard of exact symmetry.

and formal motives, and distinctly less symmetry than in either the French or Italian work. There was a good deal of unity withal and a very distinctive difference is shown as regards the planting. In the French formal work the gravel paths are the basis of the design and the parterres, fountain basins, pools and other details are laid out or set out, as it were, in the midst of the gravel walks which are always very much in evidence. In the best English work the effects secured were quite the opposite. There is always the background of turf and foliage masses upon which the paths are laid out as a much more incidental feature

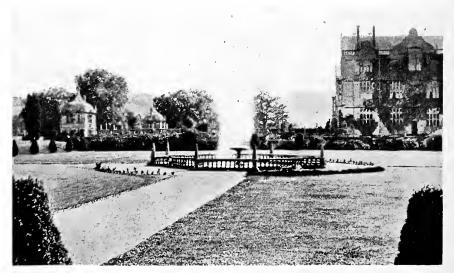
With this very brief and altogether inadequate resume of the more salient principles of earlier landscape design before us, let us now turn for a few moments to the result of all this as expressed in the landscape architecture of the present day, especially in America. Our problems here are many and varied and far removed in the character of the surroundings, climate and other conditions from almost all of those we have mentioned. The trained landscape architect in America uses his study of these earlier problems if he has the right spirit as a guide to correct principles solely. These earlier European landscape designers did this in their own case and were constantly and indefatigably searching for right principles of design applicable to the particular problem in hand. The best of them never slavishly copied others and we should not. We should use these right principles to secure distinctive American types of work. Let us now briefly consider some of the many classes or types of problems in land-scape design met with in the practice of this profession in America today, and note how we are helped in their solution by this study of the past.

In the first place what may be termed domestic landscape architecture, the designing of suburban and country estates and grounds. How varied these are, located on the rugged coasts of Maine, the tropic sands of Florida, amid the mountains and on the level prairies and amidst the semi-tropic conditions of the Pacific Slope. How make rules for such

varities of conditions? Manifestly no rule of thumb will answer. Right basic principles are of the utmost importance however, and these are suggested by our earlier studies. From Egypt, Greece and Rome, from Italy, France and England do we draw our inspiration but none of their works do we copy, only the principles there determined.

In these domestic problems there are always two main groups of factors of importance; first, the local ones, that is to say, the conditions of topography, existing vegetation, climate, soil, proximity and direction of outside factors affecting the accessibility of the site, and second, the personal factor. Who is the home for? How many are to live in it? Is it to be an all the year around one, or to be used only in the summer or winter? What funds are available for the adjustment of the land and improvement of the landscape? All these and many other things are to be ascertained as a basis from which to proceed. A careful consideration of these two points, the local and the personal, will prevent any sameness of treatment even in similar localities.

As we particularly noted in the case of the design of the Italian villa and grounds, fitness, accessibility as to supplies of material, water and so on, are Provision is made for considered. means of approach both for guests and service. Views or outlook from the site and the aspect of the finished scheme from without are all studied, and the proportioning of the three vital elements of the design, the entrance, the service and the living or pleasure portions of the grounds are carefully determined, usually the greater area being devoted to the latter. Local topographical and climatic conditions affect all



GROUNDS OF MONTACUTE HOUSE IN ENGLAND. Note the predominance of greensward and foliage.

these point as do also the client's personal desires.

From the work of these earlier designers we get inspiration helping us to determine the general character of the special treatment. Shall it be formal or informal and here is where there should be the heartiest co-operation between the client, the architect of the buildings and the landscape architect, for manifestly the type of house selected should suit the site as well as fit it, and the best design is that which most comprehensively meets all these conditions. While some sites much more emphatically demand rigid formality

than others, almost every house no matter how informal its general character, is composed of rigid straight lines and definite angles. There is therefore almost always a rightness in some formality immediately about such a structure. This formality may not go so far as to involve exact symmetry or balance and the gradual cession of any sort of formality, the merging of this sort of design into the free and informal natural surroundings is of the utmost importance in securing that unity and harmony without which no design is successful.

(To be continued.)

ASKED and ANSWERED

An exchange of experience on practical matters by our readers. You are invited to contribute questions and answers to this department.

M. N. B., W. Va. Our custom is to mark graves in Woodlawn Cemetery with a board with date of death, and the name of the deceased. Is there any other way better?

Ans. If it is the intention to continue to mark all graves a more enduring material should be used for this purpose. Slate or marble slabs uniform in size are often used. Cement markers are easily made, and if the material is properly mixed will be found enduring. See the advertisements in Park and Cemetery. A less cumbersome method and one used in most modern cemeteries is a plat record with all graves correspondingly numbered.

J. T. Y., Virginia. Where lots are assessed annually, what is the best method for collecting same from delinquent members?

Ans. An effective method has been the adoption of a law that prohibits any interment in a lot against which there is a claim for annual care. Mr. Frank Eurich makes these suggestions: A good live collector might be of some help; it might also be effective to threaten to display at the office a list of delinquents. Prepayment for all work without fear or favor is the surest preventative.

P. O., Penn. (1) Is it right to allow Sunday funerals? (2) Would it not be right to forbid children in cemetery if not accompanied by parents?

Ans. Sunday funerals have been discontinued in many Catholic and Protestant cemeteries and they are being discouraged at cemeteries generally where the rules do not positively prohibit them.

Children too young to observe the rules of a cemetery should not be allowed to enter the grounds without some one in charge of them.

J. B., La. What is the best material to be used in building drives, making them dustless and noiseless; also for making walks, other than Schillinger, for pedestrians?

Ans.: Experience in constructing park drives has demonstrated within the last few years that most of the forms hitherto found successful can, owing to modern forms of traffic, no longer be employed with success, resulting as they do in excessive maintenance costs.

A park drive should possess some qualities which are not strictly necessary in ordinary traffic streets, namely those properties which are conducive to quietness, comfort in traveling and color effect.

It is usual, moreover for park authorities to be so cramped for funds and forced to take up the road problem on such comprehensive lines that the matter of economy plays an important part in the selection of a pavement.

In meeting all these conditions, probably the most successful park pavement thus far introduced has been that of asphaltic concrete, laid in a macadam foundation. This pavement can be easily and economically laid by the park commissions, with there own forces and plant at a cost of approximately one-third of the usual price paid for standard types.

In composition, the pavement consists of a stone aggregate, so graded as to contain particles ranging from 1/2" to 1/4" in diameter to fine dust, combined to form a minimum per-

centage of voids, and mixed while in a dry state with approximately ten per cent of tar asphalt binder.

In the selection of this binder, consideration must be given to climatic conditions of the locality, as for instance, a binder to be successful in the comparatively torrid climate of New Orleans should of necessity give a higher melting point than one employed in a northern latitude.

For park service, many of the softer types of rock may be used successfully, resulting in an even more rubber-like and resilient composition than in the case of harder mineral aggregate.

Myron H. West.

J. G., Washington. What is the best way to keep roads free from weeds? Our roads are surfaced with fine gravel.

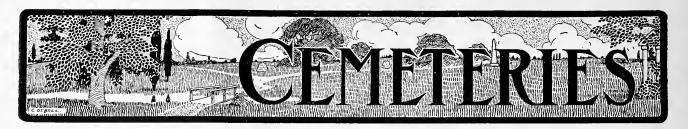
Ans. A number of excellent chemical weed exterminators used for this purpose are advertised in PARK AND CEMETERY. Care should be taken to apply such exterminators when the roads are sufficiently moist to allow the liquid to get down to the roots.

A. R. Gross, Supt. Mount Green-wood Cemetery Morgan Park, Ill., furnishes the following formula for a Weed Killer on drives with comments on its use as a result of experiments in that cemetery. "To 20 lbs. White Arsenic add 15 gal. soft water, stir and boil, then add 35 gal. soft water, 40 lbs. Caustic Soda; boil again,—stir constantly. Use 50 gal. cast iron kettle. When using take one pail poison to four pails water and spray on weeds with sprinkling can (galvanized).

Above is deadly poison—don't get on hands, if so wash well with clear water.

For many years past this solution has been applied to the drives in Mount Greenwood Cemetery where weeds have made their appearance. The application is always made immediately after a rain so that the solution will go directly to the roots and not be lost by the stone absorbing it. Shortly after the appearance of the sun the weeds treated turn brown and within a few days entirely disappear. Great care must be exercised in the application to prevent spraying any of the solution on the grass edge as that also will turn brown and be an eye-sore for a long

The cost of the chemicals combined with the labor of preparing and applying is very small and the result is far more satisfactory than the antique practice of weeding,



CAVE HILL CEMETERY, LOUISVILLE, KY.

In making its claim as being one of the leading cemeteries in the country, and by this is understood excelling in beauty, Cave Hill Cemetery, at Louisville, Ky., has just cause to its title. From its earliest days, when, in the bleak month of February, 1848, it was dedicated, until the very present there has been no other idea in mind than that of perfect care and excelling in splendid attraction.

The cemetery is owned and controlled by the Cave Hill Investment Co., an organization chartered by the Legislature for the purpose of controlling the cemetery and likewise for the purpose of receiving special bequests. The cemetery proper turns over 20 per cent of the lot and grave sales to this company. The investment of this fund is restricted to bonds of the United States, or of Kentucky, or of the City of Louisville or to other good and safe securities, provided the president and all the directors of the said company shall consent thereto in writing before such investment is made. These consents are to be recorded in the record book of each board respectively, and should any other investment be

made except as herein provided, the directors making or consenting to the same shall be personally liable for any loss arising therefrom. This makes the financial section of the operating department above reproach and is a protection to all investors. At the present time this fund amounts to about \$204,000, and the same will not be touched until the last lot in Cave Hill has been sold. It has been estimated that this will not be the case until the year 1975.

Cave Hill Cemetery contains 287 acres, of which 157 acres is now improved, which includes about 37 acres of reserves, some of which will eventually be available for lots. The yearly average of interments is now 1,100, and the total to May 31, 1911, was 44,495. The National Cemetery, which has an area of 150,000 square feet, is owned by deed by the United States Government, and to the present time there are buried here 4,501 Union soldiers. The government has erected in this section of the cemetery a beautiful stone rostrum for use on Decoration Day. The Confederate Association of Kentucky also has a large plot for the burial of ex-Confederate soldiers, and there are now buried there 308 members of the Lost Cause. In this connection it might be mentioned that this cemetery is unique in this respect. It is one of a very few cemeteries in the country where there are both the Union and the Confederates buried and where each celebrates its special Decoration day services annually. The Union section is under the guidance of a special U. S. Government superintendent, and the graves are looked after by the regular force (another unique idea) just as any other lot holder. There are no monuments erected in the National Cemetery to officers of distinction as in Arlington and elsewhere, but the large number of little slabs show how many heroes fell in the cause of the Union.

There are thirty sections thus far laid out and planted in Cave Hill and their average size is five acres. In the single grave sections, which includes all three and four grave lots, the graves are made flat and marked with numbered concrete markers, and the headstones are restricted to ten inches in height. There are eight miles, 4,555 feet, of twenty-foot macadam roadways, the principal of which are covered with asphaltoil-



SUPERINTENDENT'S OFFICE, CAVE HILL CEMETERY,

LOUISVILLE, KY.





LOTUS POND AND PART OF NATIONAL SECTION.

THE UPPER LAKE IN CAVE HILL.

ene and tarvia. There are also fourteen miles, 2,697 feet, of 8'-0" grass walks. The grounds are partly enclosed with a standard 9'-0" vitrified brick wall, 131/2 inches thick with double 4'-0" square piers 10'-0" high every 100 feet for a distance of one mile, 1,645.81 feet. On the boundary lines facing the principal streets there are 2,608.5 feet of 5'-0" stone wall surmounted with a 5'-0" steel fence. The total cost of this fence wall of both kinds was to date about \$95,000.00. This fence wall is of a standard design, which is to be extended from year to year until all of the cemetery has been enclosed, making a total length of three miles, 1,837 feet.

The main entrance, with its imposing buildings, surmounted by a heroic marble figure of the angel Gabriel, is very striking. These buildings include the secretary's office and superintendent's office, and are erected with Bedford, Ind., stone and cost \$20,-000.00. From these buildings lead the main avenue, on either side of which are avenues of maples, giving the whole a very striking and beautiful effect. These stretch back for at least several hundred yards, and no graves are visible, and the effect on entering is rather that of strolling into a public park. The roads, so well kept, the abundance of verdure and the peacefulness add to the charm that is everywhere felt.

While it is true that there are other cemeteries containing a larger percentage of costly monuments, there has been little expense spared by many in this respect here, and the art and magnificence displayed in the monuments is everywhere evident.

There are nine natural lakes here, ranging in area from 110,000

square feet to 4,000 square feet, the larger of which are supplied by springs, and the remainder by city water. The water supply for the system in the cemetery is received from the city, and the system now measures eight miles, 2,325 feet, of pipe of all sizes from eight inch cast iron to 34 inch galvanized iron pipe, with 127 self-closing hydrants for the use of the lot holders, and 177 hose boxes for watering. The sewerage system, which is connected with the new system of the city, is six miles, 5,005 feet long, with 339 catch basins. The lakes of Cave Hill Cemetery constitute one of its greatest and most beautiful charms and natural features, and the variety of aquatic plants which can be grown in them adds much to the attractiveness of the grounds.

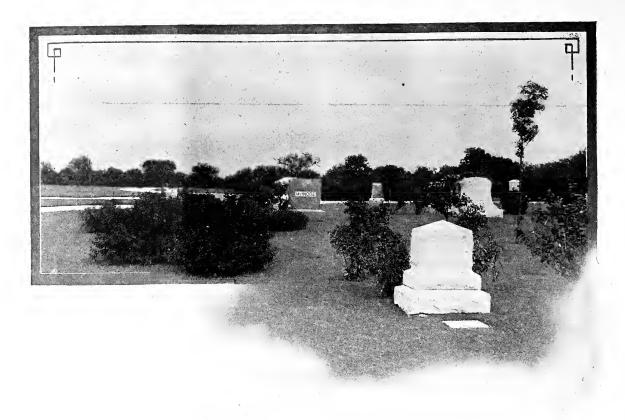
The geographical location of Cave Hill, lying as it does between the north and the south, affords a splendid opportunity for the cultivation of the rarer and more beautiful specimens of the flora of both sections; the variety and perfection of the trees and shrubs which adorn the grounds of the cemetery gave Cave Hill a value and reputation as an arboretum which is well deserved. There are two nurseries in Cave Hill for the propagation of stock for use in the cemetery. These nurseries now contain about 20,000 trees and shrubs and cover about three acres. In the grounds there are practically all trees indigenous to the climate, and all hardy specimens from other countries. There are no greenhouses in the cemetery.

There is no curbing allowed of any kind around the lots, with the exception of that placed there years ago. All monuments must be placed in the center of the lot, but the size of the same is not restricted as yet. Neither are the lot owners required to submit designs of monuments. Foot stones or erect slabs are absolutely prohibited. Grave mounds

(Concluded on page XIII)



THE CAVE FROM WHICH THE CEMETERY IS NAMED.



MOUNT HOPE CEMETERY, JOPLIN, MO.



MOUNT HOPE CEMETERY, JOPLIN, MO. Note the grave marks flush with the sod, and the judicious planting of shrubbery.

MOUNT HOPE CEMETERY, JOPLIN, MO.

Mount Hope Cemetery, located in Jasper county, southwest Missouri, on the electric car line between Joplin and Webb City, is an excellent example of what can be accomplished in developing a cemetery on the lawn plan in a few years. Mount Hope is but a little over five years old, but as the illustrations show, the cemetery has the appearance of having been carefully maintained for a much longer time. Its location was well considered, and it lies within easy distance of the two cities above named, and yet far enough from either to render the advance of the city limits upon the cemetery grounds to be a matter of remote possibility. The tract is well located and has the advantages of area and natural characteristics which fit it to meet the demands of the section of country which it may be expected to serve for many years.

It is conducted on the lawn plan with the important feature of perpetual care. the fund for which is accumulating by the setting aside of a certain percentage of the returns from the sale of all lots and single graves, and the investment of this percentage in reliable interest-bearing securities under proper safeguards, so that perpetual care goes with the sale of every burial lot and single grave. Under this arrangement all portions of the occupied cemetery receive equal care.

Mount Hope is conducted on nonsectarian lines, and is open to all without regard to religious or fraternal associations.

Its rules and regulations have been adopted after careful investigation into those governing other important cemeteries of the country, and which have been found absolutely necessary to secure the proper maintenance of an upto-date burial park. These rules and regulations are not only adopted to define the relations of lot owners to their

ownership in the cemetery, but they also point out to the superintendent his duties. The superintendent must permit nothing to be done on the grounds that would in the slightest degree be detrimental to the maintenance of the landscape beauty and general appearance of the cemetery.

The association has recently published a handsomely illustrated pamphlet with a large number of attractive views, from which the three herewith given have been selected. They show a very important feature of landscape work in this cemetery—the free distribution of appropriate trees and shrubbery to form settings for the monuments, as well as in combination to present variety of treatment to secure contrasting as well as harmonious effects.

The plans were prepared by Mr. Sid J. Hare, landscape architect, and they have been ably carried out by Mr. T. N. Campbell, superintendent.

HOW TO BEAUTIFY A COUNTRY CEMETERY

Some few weeks back Mr. J. T. Cotten, secretary and treasurer of Oakland Cemetery, Weatherford, Texas, offered a prize of ten dollars in gold for the best article on "How to Improve and Beautify Oakland Cemetery." A competent committee made the award to Mrs. J. N. Chandler, whose paper under the above head appears below:

Oakland Cemetery.

This is a very "grave" subject, nay a very harrowing subject, for Hamlet says that church yards yawn and hell itself breathes out contagion. This same Hamlet says that graves give up their dead and unhallowed ghosts walk until the midnight cock gives warning, that wandering spirits must hie them to their narrow cells.

But, the gods be praised, Hamlet lived centuries ago, and the evolution of thought has brought us to a much more hallowed idea concerning our dead; we have all come to love any spot which enshrines our departed ones, and I hope that we of Weatherford will so direct our thoughts and actions that Oakland Cemetery will become the pride of every one in our community. Now, it is a bare plot—seemingly a waste impossible to treat, but wait just a little while and it will blossom as a rose.

The subject is timely for some interesting retrospect. As long as there have been inhabitants on this earth, there has been a disposal of the dead. But, listen to the manner in which this has been done and to the peculiar customs which have prevailed. One sect exposed each body to have the soft tissues torn away by the vultures and then placed the bones in a box for preservation. This custom still holds with some South American

tribes. The Chinese today hold annual dances over the graves of their departed. The Indians of North Carolina laid their corpses on the ground, covered them with a thin coat of elay and burned the whole. The Kaffirs place their dead in sitting posture. Some tribes lay their bodies upon platforms in trees to protect them from ravenous beasts. The very first sepulchres were the Egyptian tombs hewn in the cliffs along the river Nile. As the Indians gave their men the bow and arrow for the "Happy Hunting Ground"-so the Egyptians gave their women their box of cosmetics, so that they might make a good appearance before Charon, who was to row them across the river Styx.

France has a curious burial custom, Every dead body is taxed, every one who serves at the funeral is paid, the sacristan who opens the church, the priest, who intones the prayer, the men who carry the body; we have all heard of the wake and the paid mourners. How different from us, who have the refining influences of the highest civilization. The laying away of our dead is the labor of friendship and of love, nay the privilege rather than the duty. Grief has lost its character of despair: we soften its pangs by lining our graves with flowers and foliage: we cover the clods with beautiful blossoms, we give every evidence of respect and affection. Our cemeteries are more and more becoming beauty spots.

In the old world as well as the new, the tourist always wends his way to the attractive cemeteries.

The most interesting one in all the world is that of Pompeii, the city which nature buried, and which man is resurrecting. There is never a visitor to Paris who does not take time to go out to "Pere La Chaise" to place a flower to the memory of those lovers, Abelard and Heloise, the two who were divided in life but unit-

ed in death. We go to "Pere La Chaise" not because it is the mausoleum of the nation's intellect, but because all the world loves a lover. Our own New Orleans cemetery attracts world-wide interest, because of its system of overground buried.

Our interest turns to the ludicrous, when in browsing about old cemeteries we find such quaint inscriptions as:

"Here lies the Body of Thomas Woodhen, The most lovable of husbands and the most amiable of men.

N. B.—His name was Woodcock, but it would not rhyme.
Or still again:

"Here lies a poor woman,

Forever and ever.'

Who always was tired For she lived in a house Where help was not hired. Her last words on earth were: Dear friends, I am going Where washing aint done. Nor sweeping nor sewing And everything there Is exact to my wishes, For where they don't eat There's no washing of dishes. I'll be where loud anthems Will always be ringing, But having no voice I'll get clear of the singing Don't mourn for me now. Don't mourn for me, never-I'm going to do nothing

By the way, it is found that the commonest tombstone inscriptions are, "In the midst of life we are in death," "His end was peace," and "He tempers the wind to the shorn lamb." The sentiment of each is comforting and consolatory, but neither one comes from the Bible.

By this time, after all that I have told you about cemeteries, I am sure that you are so thoroughly interested that you will listen eagerly to all my suggestions for mproving Oakland.

Every successful thing must have a good foundation, so first of all, employ a land-scape gardener to lay off the plot of ground in lots, driveways, flower beds and walks. Employ a man with a sense of the artistic. Five years from now it will be too late. If the ground is laid off properly now, then each lot owner, each interested citizen will have something to work to. After this work has been accomplished, have trees set out all along the driveways; trees, yes and more trees. The gentle breeze, the singing birds and the inviting shade must come before anything else.

One essential, and perhaps the very first, must be water available at all times.

What can our personal care do, if the natural requisites for growth are not provided. No matter how great our pride, or how assiduous our attention, it is love's labor lost unless every lot can be sprinkled.

I would suggest restful seats, as many as can be provided along the streets. The grief stricken, those who are fatigued by working on their lots, or the strollers, will all find these provisions for rest a boon. Until all the lots are occupied, cherish plots of wild flowers here and there; preserve nature as long and as far as possible.

Appoint a cemetery committee which shall include one or more women. This committee can serve one, three or five years.

Civic pride will cause any one to serve on such a committee. The first business of this committee should be to secure protection against stock, and this means the all-destroying chicken. I advise that this committee study the subject of cemeteries, and from time to time publish articles giving ideas for the benefit of the lot owners, new ideas for the treatment of the lot, for the selection of monuments, the rules which all should observe, and so on.

This is to insure intelligent procedure among the lot owners, as well as uniformity for our ground. A beautiful home for the dead will inspire a beautiful home for the living, so that all our little city will be influenced in civic pride through our efforts for our cemetery.

So many of our loved ones who have moved away are always brought home to be buried and the services are conducted at the cemetery in the broiling sun of summer or the cold blast of winter. What an advantage a small chapel erected in central part of the grounds would be! It need not be expensive, but made in the form of an artistic pavilion, and oh! what a comfort it would be.

And now for the something new. There are styles in cemetery making as well as in everything else, and we all know the dreadful crime of being out of fashion. You know it is as well to be out of the world, as out of fashion. Perhaps you have all heard the story of the man who was desperately ill; his physician told him that his days were numbered, so he called all his family to his bedside, told them that he was going and that they must get out his P. P. C. cards, right away. So, with their precedent, we MUST BE STY-LISH.

There is a great deal of literature being printed now-a-days; in this, the cemetery is coming under the limelight of much discussion. The new style, and it certainly is appealing, is to do away with the irreguar effect of high and low stones, curbing and no curbing, so the lovers of aesthetic beauty and symmetry are agitating the Park cemetery. In this the appearance of uniformity and restfulness prevails. Well kept trees, walks and drives accompany grass plots in unbroken succession. The

flat simple marble pillow is inscribed with the name. The grave is flat, rather than the raised mound which we have had so long. In other words, our dead are laid to rest in a beautiful park. Peace and repose prevails. It may take us a little while to accustom ourselves to the change; innovations nearly always arouse opposition, at first; we have grown to know one thing and the other seems strange. But suppose we think about it. Now is the accepted time. The Park cemetery is growing in popularity. We are standing upon the threshold of its appearance. If we begin to improve Oakland along the old line of cemetery treatment in less than ten years we will find ourselves away out of style and regret that we did not avail ourselves of the passing opportunity. If we today, inaugurate, those of tomorrow will adopt. The cemetery is the one spot in all Weatherford upon which we can all agree. Young and old, rich and poor have a common interest in this spot. Let us pluck the blossoms of good intent, and weave them into the chaplet of good resolutions to make "Oakland" the most beautiful spot in all our city.

Let us realize that although we may have no precious dead today, we may have them tomorrow, and then we will hope to say with Shakespeare when he thought of his loved ones in old Trinity church yard at his home on the Avon.

"Here lurks no treason, here no envy smells,

No noise, but silence and eternal sleep."

Or perhaps we favor the lines which Mark Twain selected for the grave of his idolized daughter,

"Warm summer sum,
Shine kindly here;
Warm southern wind
Blow softly here.
Green sod above
Lie light, lie light,
Good night, dear heart,
Good night, good night."

LATE CEMETERY LEGISLATION IN ILLINOIS

The following bills were passed by the recent legislature of Illinois:

House Bill No. 301 in Senate: A Bill for an Act to amend Section 1 of an Act entitled, "An Act to protect all citizens in their civil and legal rights, and fixing a penalty for violation of the same," approved June 10, 1885, in force July 1, 1885, as amended by Act approved May 15, 1903, in force July 1, 1903. As amended it reads as follows:

Sec. 1. That all persons within the jurisdiction of said State of Illinois shall be entitled to the full and equal enjoyment of the accommodation, advantages, facilities and privileges of inns, restaurants, eating houses, hotels, soda fountains, saloons, barber shops, bath rooms, theaters, skating rinks, concerts, cafes, bicycle rinks, elevators, ice cream parlors or rooms, railroads, omnibuses, stages, street cars, boats, funeral hearses and public conveyances on land and water, and all other places of public accommodation and amusement, subject only to the conditions

and limitations established by law and applicable alike to all citizens; nor shall there be any discrimination on account of race or color in the price to be charged and paid for lots in any cemetery or place for burying the dead, but the price to be charged and paid for lots in any cemetery or place for burying the dead shall be applicable alike to all citizens of every race and color.

House Bill No. 137 in Senate. A Bill for an Act to amend Section four (4) of an Act entitled, "An Act to provide for the organization, ownership, management and control of cemetery associations," approved May 14, 1903, in force July 1, 1903. Hereby amended to read as follows:

Sec. 4. That said persons so receiving said certificate of organization of said association shall proceed to elect from their own number a board of trustees for said association, which said board shall consist of not less than six (6) nor more than ten (10) members, as said persons so receiving said certificate may determine; that said trustees when elected shall im-

mediately organize by electing from their own membership a president, vice-president and treasurer, and shall also elect a secretary, who may or may not be a member of said board of trustees, in their discretion, which said officers shall hold their respective offices for and during the period of one (1) year, and until their successors are duly elected and qualified. Said trustees when so elected shall divide themselves by lot into two classes, the first of which shall hold their offices for and during the period of three (3) years, and the second of which shall hold their offices for and during the period of six (6) years, and that thereafter the term of office of said trustees shall be six (6) years, and that upon the expiration of the term of office of any of said trustees, or in case of the resignation or death or removal from the State of Illinois of any of said trustees, or their removal from office as provided in this Act, the remaining trustees, or a majority of them, shall notify the county judge in which said cemetery is situated, of such vacancy or vacancies in writing and thereupon said county judge shall appoint some suitable person or persons to fill such vacancy or vacancies; and that thereafter the county judge of the county in which said cemetery association is located shall always appoint some suitable person or persons as trustees: Provided. however, that in making such appointments the said county judge shall so exercise his power that at least two-thirds (2-3) of said trustees shall be selected from suitable persons residing within fifteen (15) miles of said cemetery, or some part thereof, and the other appointees may be suitable persons interested in said cemetery association through family interments or otherwise who are citizens of the State of Illinois.

Senate Bill No. 437 in House. A Bill for an Act to amend an Act entitled, "An Act in relation to the conveyance, use and preservation of burial lots in cemeteries," approved April 21, 1899, in force July 1, 1899, by adding thereto a new section to be known as Section 2. Amended as follows:

Sec. 2. That every such company or association incorporated for cemetery purposes under any general or special law of the State of Illinois may receive, by gift, devise, bequest, or otherwise, moneys or real or personal property, or the income or avails of such moneys or property, in trust, in perpetuity for the perpetual and permanent improvement, maintenance, ornamentation, repair, care and preservation of any burial lot or grave, vault, tomb, or other such structures, in any cemetery owned or controlled by such cemetery company or association, upon such terms and in such manner as may be provided by the terms of such gift, devise, bequest, or other conveyance of such moneys or property in trust and assented to by such company or association, and subject to the rules and regulations of such company or association, and every such company or association owning or controlling any such cemetery may make contracts with the owner or owners or legal representatives of any lot, grave, vault, tomb, or other such structure in such cemetery, for the perpetual and permanent improvement, maintenance, ornamentation, care, preservation and repair of any such lot, grave, vault, tomb, or other such structure in such cemetery owned or controlled by such cemetery or association.

The Pine Grove Cemetery, Milford, Mass., Tax Case

The following is the finding of the County Commission in the matter of the petition of the Pine Grove Cemetery proprietors on the abatement of the 1910 tax on certain property:

"Upon the petition of the proprietors of the Pine Grove cemetery of Milford, located in the town of Milford, in the county of Worcester and the commonwealth of Massachusetts, filed with the clerk on the fifth day of January, A. D. 1911, and thence by due adjournment and continuance pending till the present time for the abatement of the taxes assessed for the year, A. D. 1910, by the assessors of said town of Milford, upon certain personal property held by them, said petition setting forth:

the taxes assessed on its said property was August, 1910, and that within six months after the said date of its tax bill it duly applied to the assessors of said town for the abatement thereof. That the petitioner subsequently filed, as required by law, with said board of assessors, and at its request, a list of its real and personal property and estate which was subject to taxation, but without waiving any of its rights to an abatement and exemption then claimed, and said list was accepted by said board of assessors and said board found that there was reasonable excuse for the delay in filing said list and that there was good cause for said delay.

"That on December 22, 1910, the petitioner received notice from said board of assessors of their decision and refused to abate said tax as requested by the petitioners. That the petitioner, being aggrieved by said refusal of the said board of assessors to abate said tax, within 30 days from receiving said notice appeals from said order and finding, and prays that said tax be abated for reason that said personal property is not by law taxable but is exempt from taxation and for other reasons.

"After due notice to said town of Milford, at the hearing before said commissioners came said petitioner, by

"That the date of tax bill rendered for taxes assessed on its said property and the said town of Milford by John C. August, 1910, and that within six Lynch, Esq., its attorney and the said town of Milford by John C. Lynch, Esq., its attorney and were heard, —it is considered and adjudged by said commissioners that said petition ought to be granted.

"And said county commissioners find that while the list required to be brought in to the assessors was not brought in within the time specified, there was good cause for delay in bringing in said list of their estate as required by law, and further that the proprietors of the Pine Grove cemetery of Milford is, as a matter of law and as a matter of fact, a charitable corporation and as such is exempt from taxation. (Acts 1909, Chap. 490, Part 1, Sec. 5, Clause 3.)

"And thereupon the county commissioners order and decree that said tax assessed for the year A. D. 1910, by the said assessors of the town of Milford upon the personal estate of said petitioner, be abated in full and hereby make abatement of said tax on said personal estate in full. (Acts 1909, Chapter 490, Sec. 76, Part 1.) By agreement of counsel and by order of this board, no costs are to be taxed or allowed to said petitioner or to said town of Milford."

Since the above decision was filed the Town of Milford has appealed the case to the Massachusetts Supreme Court.



Considerable damage has been done to the St. Vincent De Paul cemetery in Larksville, Pa., by the "caving in" of the surface over the Gaylord coal mine. Numbers of graves have been disturbed and practically annihilated, and it is expected that the disturbances will not cease until all the unsupported crust sinks into the mine.

A plan to make a memorial park of old Huron Cemetery, Kansas City, Kans., as a means of avoiding trouble growing out of the occupation of the cemetery by the Conley sisters who claim ownership by treaty with the Wyandottes, is being agitated. The plan suggested is to give the new Young Women's Christian Association the part of the cemetery that fronts on Seventh Street. There are no graves in this part. The idea is to replace the wall on Minnesota Avenue with an ornamental terrace and build walks about the cemetery and a monument in the center. This plan would not necessitate the removal of the bodies.

The town of Sterling, Mass., has not appropriated money for the care of its cemeteries for many years and the cemetery committees have been using the interest of funds left for the perpetual care of certain lots for

the care of the whole cemetery. The cemetery committee is at last waking up to a doubt whether it has the legal right to use the interest of these funds for general care. And it is quite time it did.

Extensive improvements are under way in Forest Hills Cemetery, Chattanooga, Tenn., among them the opening of three new drives, the reconstruction and repair of the old drives the opening of two new burial sections, a radical reconstruction of the lily ponds, a large increase of plants and shrubbery in the Cemetery. In addition the Cemetery is preparing to take over the building of concrete vaults for use in the Cemetery; and two main sewers across the Cemetery are to be built entirely under ground and of the best possible concrete construction. The enlargement and improvement of the Lodge is also to be undertaken.

The Oneida, N. Y., cemetery bill has become law. The bill provides for the taking by the city of the old cemetery east of the Elizabeth street school. It is a disgrace to the locality, being covered with thick underbrush. The few bodies, headstones and monuments that remain will be

(Continued on page 626)

THE PHILADELPHIA CONVENTION OF THE A. A. C. S.

The 25th annual Convention of the Association of American Cemetery superintendents is to be held in Philadelphia, September 12-15, 1911, and it is scarcely necessary to expatiate on the appropriateness of the "City of Brotherly Love" for such a meeting, nor the many matters of interest the historic city can offer to the members of the Association and its guests. As will be seen by the following program, the committee in charge has laid out a strenuous round of business and pleasure, and this annual opportunity of making acquaintance and gathering information and experience should be seized upon under any pretext that will admit of the trip. Philadelphia is a splendid city to visit, full of interest in its civic assets and historic associations to cemetery men and the surrounding country, in which several excursions will be made, will impress those unacquainted with that locality as they have never been impressed be-

Special attention is requested to the following communication from the chairman of the Executive Committee:

"It is the desire of the Executive Committee having in charge the arrangements for the 25th Annual Convention of American Cemetery Superintendents, to be held at the Continental Hotel, Philadelphia, September 12-15, 1911, to provide for an exhibition of models, tools, records, photographs, planting and improvement plans, sectional plans or maps, plans of receiving vaults and chapels, office and entrance plans, or photographs or anything else that may be of interest to the members.

"You are therefore requested to send or bring something that may be placed on exhibition.

"If you can arrange it we would like to have your exhibit here not later than September 10th, so as to allow time to have them properly marked and arranged.

"Trusting that you will favor us with something in this line and that we will have the pleasure of seeing you on the above dates, and for further information regarding hotel accommodations or other matters pertaining to the meeting, please address the undersigned:

Geo. M. Painter,
Chairman Executive Committee.
Mr. Painter's address is: 1409
Arch St., Philadelphia, Pa.

The following is the program so far as it is arranged to date:

TUESDAY, SEPT. 12, 1911.

Opening session at Continental Hotel

10 a. m. Convention called to order.

Address of welcome by Hon. John E. Reyburn, mayor of Philadephia.

Response by W. C. Grassau, President of the Association.

Annual address by the president. Annual report of Secretary-Treasurer, Bellett Lawson, Jr.

Communications.

Appointment of Committees.

Half-Hour with the Secretary-Treasurer.

Recess for Lunch.

2:00 p. m. Business Session Continental Hotel.

Paper—Cemeteries 25 Years Ago and Now, Geo. W. Creesy, Salem, Mass.

Discussion.

Question Box.

Paper—Rearranging an Old Cemetery, F. H. Rutherford, Hamilton, Ontario.

Discussion.

3:30 p. m., Visit Fernwood Cemetery, Delaware County, Pa.

Tuesday evening in the hands of the Executive Committee.

WEDNESDAY, SEPT. 13, 1911.

Take automobiles at 9 a. m. at Continental Hotel to visit Fairmount Park, Laurel Hill, Mt. Peace and Northwood Cemeteries, Ardsley Burial Park, Thomas Meehan & Sons Nurseries and the Andorra Nurseries and West Laurel Hill and Westminster Cemeteries.

Luncheon en route.

8 p. m. Evening session, Continental Hotel.

Nomination of officers.

Address—Road Construction and Maintenance, John Dunn, C. E.

Discussion.

Question Box.

Paper—Cemetery Records, Thomas Wallis, Ravenswood, Chicago, Ill.

Discussion.

THURSDAY, SEPT. 14, 1911.

9:30 a. m. Business Session, Continental Hotel.

Paper—Motor Trucks in the Cemetery, Edward G. Carter, Chicago, Ill.

Discussion.

Question Box.

Address-Oglesby Paul, Esq.

Paper—Community Mausoleums, Bellett Lawson, Jr., Chicago, Ill.

Discussion.

Recess for Lunch.

On the afternoon of Thursday, Sept. 14, the Wilmington members of the Executive Committee invite the convention to take the train for Wilmington, Delaware, as their guests.

FRIDAY, SEPT. 15, 1911.

8:30 a.m. Leave the Continental Hotel to enjoy a boat ride on the Delaware river, visiting the Henry A. Dreer nurseries and greenhouse establishment at Riverton, N. J.

12 m. Leave Riverton, N. J., by boat for Trenton, N. J., to visit the Wm. H. Moon Co. nurseries at Morrisville, Pa., thence to inspect Riverview Cemetery, Trenton, N. J., as guests of the Trenton members of the executive committee.

4 p. m. Afternoon session at Riverview Cemetery.

Paper—Calcium Chlorides, R. K. Pierce, Syracuse, N. Y.

Election of officers.
Unfinished Business.

Reports of Committees.

New Business.

Adjournment.

Return to Philadelphia by boat.

The rates at the Continental Hotel are as follows: Room with bath, \$2 and upwards; room without bath, \$1.50 and upwards.

of The cemetery readers journal who have not identified themselves with the Association of American Cemetery Superintendents will be cordially received at the Philadelphia meeting. The object of the association is the betterment of cemeteries and in the words of Prof. L. H. Bailey, "it is one of three national societies conserving the landscape gardening and rural art of the country." It is largely due to the influence of this association that the lawn plan and numerous other reforms in cemetery management have been so generally adopted..

The conventions of this association bring together many of the most expert cemetery superintendents and secretaries in this country whose discussions and addresses always helpful to those seeking instruction. Any person connected with a cemetery in any official capacity is eligible to membership. The membership fee is \$1.50 and the annual dues \$3. Every cemetery corporation in the United States and Canada should be members of this

association and have at least one representative at its annual meetings. Officers are, president, W. D. Grassau, Greenwood Cemetery, Brooklyn, N. Y.; vice-president, J. J. Stephens, Green Lawn Cemetery, Columbus, Ohio; secretary-treasurer Bellett Lawson, Jr., Elmwood Cemetery, of Chicago, postoffice address River Grove, Illinois.

Missouri Park and Cemetery Improvement Association

The third annual meeting of the "Missouri Park and Cemetery Improvement Association" will be held at the Maryland Hotel, St. Louis, Mo., August 22-23. The following program has been prepared:

PROGRAM: AUGUST 22.

Address of welcome, A. E. Todt, Supt. SS. Peter and Paul.

Address by President, Wm. Mittelbach, Boonville Cemetery.

Report of Secretary.

Appointment of Committees.

Paper—M. P. Brazill, Supt. "Calvary," St. Louis.

Paper—Perpetual Care, J. A. Schmiemeier, Supt. "St. Mathews," St. Louis.

Paper—Underground Burial Vaults, President Wm. Mittelbach.

Recess for Lunch.

1:15 P. M. Take cars to cemeteries in southern part of city, "Mt. Sinai," "St. Marcus," "New Picker," "SS. Peter and Paul," "St. Mathews," and "Concordia" cemeteries.

Lunch and refreshments will be served at "New Picker" Cemetery.

Evening Session at St. Mathews Cemetery.

Paper—On Records, M. N. Reker, bookkeeper, "SS. Peter and Paul" Cemetery.

Supper will be served at "St. Mathews."

AUGUST 23.

Visit north end cemeteries: "Calvary" and "Belfontaine;" afterwards Park sand Shaw's Garden."

A. G. TODT, Secretary.

CEMETERY NOTES

(Concluded from page 624)

removed by the city authorities. The plot will make an ideal playground being near the Elizabeth street school, and the center of a district where there are many small children.

The cemetery employees of Boston are again urging the "Saturday half-holiday" privilege.

The City Council of Austin, Texas, has been considering an ordinance providing for the calling of an election

to vote on an issue of bonds to the amount of \$33,000, for the purpose of purchasing and improving a public cemetery.

In connection with a recent sale of 500 acres at Wyandotte, Long Island, to the St. Patricks Cathedral by the Pine Lawn Cemetery Co., it is interesting to note that Pinelawn cemetery itself is the largest in the United States. It comprises 2,319 acres, of which 1,900 are available for burial purposes. It was started in 1904 by a wealthy corporation which planned great things for it and it was dedicated September 15, 1904. The Brooklyn "Eagle" says of it: It is four times the size of Prospect Park, and so has succeeded in getting that park-like effect so hard to arrange in places of the kind. Seventy-two acres of it, nearest the railroad station, are to be kept always as a park. From the top of the water tower can be seen the Great South Bay, the Atlantic Ocean, Long Island Sound and many of the famous Long Island estates. There are forty-five miles of roads, including a boulevard 200 feet wide, and 100 miles of auxiliary paths.

The New York legislature has recently passed an act connected with legislation for the village of Owego, Tioga County, and which became law on June 15, by which a board of four Cemetery Commissioners is created to have entire supervision and control of Evergreen Cemetery and any other Cemetery hereafter to be acquired. Another point in the amendment is that all money or property bequeathed, devised or donated, the income of which is to be applied to general or specific lot care and improvement, shall be immediately turned over by the commission to the village treasurer to be invested by the village trustees in the name of the village as a part of the permanent cemetery fund, the income from which is to be applied by the commissioners as per the terms attached to the gift or trust. The board of commissioners may also adopt reasonable ordinances for the control and management of the cemetery.

NEW CEMETERIES

The Chester, Pa., Court has granted a charter to the 'Shenkels Burying Ground Association," to acquire and take charge of burial grounds and property known as the Shenkel Burial Grounds, in North Coventry township, and to maintain the same for burial purposes.

The trustees of Youngstown, O.,

township recently purchased 3½ acres of land from the estate of George Tod to be used as a township cemetery for the poor. The price paid for the land is \$6,000. The lot fronts on Craven street, Youngstown.

The Carnegie Land Co., a subsidiary of the H. C. Frick Coke Co., has donated to the Holy Trinity Polish Roman Catholic Church a well situated 5 acre tract of land in Connells-ville township for a cemetery.

Mr. F. P. Hosp, superintendent of parks for the Santa Fe R. R., has been engaged to lay out the new cemetery for the Redlands Cemetery Association, Redlands, Calif.

Plans for laying out the new cemetery at Willimantic, Conn., are being prepared by Charles N. Lowrie, landscape architect of New York.

The Oakview Cemetery association Detroit, Mich., has been incorporated with capital of \$40,000. The officers are: President, Judge Harry A. Lockwood; first vice president and general sales agent, John C. Hickey; second vice president, Robert E. Barber; secretary, Alva G. Pitts; treasurer, Charles E. Hinkle; landscape engineers, Mason L. Brown & Co. The association has purchased 127 acres of land adjoining Royal Oak.

CEMETERY IMPROVEMENTS

The West Laurel Hill Cemetery Co., Philadelphia, Pa., is starting work on its new office building, to replace the old one, recently destroyed. The contract for the erection of four more greenhouses, 28 ft. by 150 ft., is also about to be let.

A number of men have been employed in improvement of the roads, driveways, gutters, etc., of the Evergreen Home Cemetery, Beatrice, Nebr. It will take several weeks to complete the job.

The Oakwood Cemetery Association, Joliet, Ill., has bought a lot opposite the entrance to the grounds upon which it expects to erect an administration building some time in the near future.

Additional ground has been purchased for Holy Cross Cemetery. Waco, Texas. It will be fenced and improved for burial purposes immediately.

The North Burial Ground, Bristol, R. I., is to be enlarged.

A landscape architect has been engaged to look over Mt. View Cemetery, Olean, N. Y., with the idea of improving it and laying out an addition.



PIONEER FOUNTAIN, DENVER AND SCENE AT ITS UNVEILING. Frederick MacMonnies, Sc.

DENVER DEDICATES GREAT MacMONNIES FOUNTAIN

The great Pioneer memorial fountain in Denver, modeled by Frederick MacMonnies, has been finally dedicated, and is generally regarded as typical of the quality of decorative imagination that dominates the work of this gifted sculptor.

It is an elaborately sculptured story of the Pioneer and stands opposite the state capitol grounds. Four dominating figures tell the story of the early western pioneer. At the top is the scout, an equestrian statue, showing Kit Carson, the noted scout, pointing the way to the western empire. At the base of the fountain are the three other figures representing the Pioneer mother and her child, the prospector and the hunter.

Further ornamenting the fountain are mountain lion and trout heads from which water spouts into the basin and horns of Plenty and Buffalo heads complete the decoration on the main shaft. The fountain, the ground plan of which is hexagonal is raised on five granite steps. The ctone structure is 25 feet high to the base of the top figure and the latter is 12 feet higher.

The fountain measures 36 feet across the base and all of the stone work is executed in Colorado granite.

The water spouts from trout heads below the top figure and from 9 jets in the main basin at the bottom and out of three mountai. lion heads into three separate smaller basins at the bottom.

The fountain was modeled by Mr. MacMonnies in Paris and the detail plans for the stone shaft and base were made by Maurice P. Biscoe, the Denver architect.

The stone work was constructed by the Ladd-Sanger Contracting Co. of Denver and the bonze figures were cast in France.

The statue was set in place by the Duffy Storage and Movin. Co., of Denver, and one of our pictures shows the critical stage in the hoisting of the surmounting equestrian group. Our other views show the scene of the unveiling and a more detailed view of the fountain.

The unveiling was made memorable by one of the most elaborate pageants ever held in Denver. There was a parade, addresses by the governor, the mayor, and other distinguished citizens and a great gathering of "pioneers."



SETTING THE SURMOUNTING GROUP IN PLACE.



PETRIFIED FISH MONUMENT. At Fischbach, Wurtemburg, Bavaria.

Petrified Fish Monument.

One of the most remarkable monuments in the world is that erected by a Veterans' Association in Germany, not to a whaling captain or a North Pole explorer, but to his Imperial and Royal Majesty the late Wilhelm I. The monument in its natural state was found very appropriately in Fischbach, Wurtemberg, and is the petrified remains of a giant fish of some sort or other, which swam about in that neighborhood when that part of Europe was a huge sea. It is about three and a half meters, or say



SAND SCULPTURES AT ATLANTIC

FREAK MONUMENTS AND SCULPTURES

nearly ten feet, long. The monument was erected, as the inscription in German and Volapuk testify to those who can read those languages, in commemoration of the hundredth anniversary of the old monarch.

Prie Dieu in a Cemetery.

Travelers in ultra Catholic Europe and notably in the Tirol are wont to remark the votive statuary on the roadsides there. Latterly, at Bridgetown, a clysmian little settlement a few miles beyond Cincinnati, a Prie Dieu of much the same sort has been put up in the cemetery. Devotees, passing up or down the road, are wont to dismount and make devotions much as those do on the long pilgrim routes of the Continent.

Sculptures in the Shifting Sands.

Atlantic City has become the happy hunting ground of the sand sculptor. The vulgar populace there find nothing so fascinating as to hang over the Boardwalk, milady chewing a wad of gum, her husband smoking his stogie, and watching the sand artist. Sometimes he'll select one of those standing near and depict him from life. It takes time, of course; one must wet the sand to stick—but at Atlantic City time is no matter.

· And what pictures they do make—those sand artists!

"Some of 'em is all right, and some of 'em ain't," says the beach patrol, as he orders the immediate overthrow of many. But others-well, they're works of art. For these latter one needs a license. And then one ropes off an area of beach, Sometimes they're only children, these artists. One, a lad of nine, modeled a picture of two baseball players. "Safe! is its title, and it shows the baseball player just coming to base, with his rival close behind and about to catch him. The work is done by hand, with just now and then a sharppointed stick to get in the details. Sometimes after its all done the figure will be painted, but that rather spoils it. Of course there are actual works of art. For these there are large boxes, in which the sand is carefully packed. Then it is dampened, and then worked. It's a matter of hours, often, this latter. "The Seasons," after the old Greek tapestry effects. is a prime favorite. It is in white sand on a black board back-ground, and, not content with that, the sand, too, is painted black. The Lion of Lucerne is also often shown.



A PRIE DIEU NEAR CINCINNATI. Copy of a European Roadside Shrine.

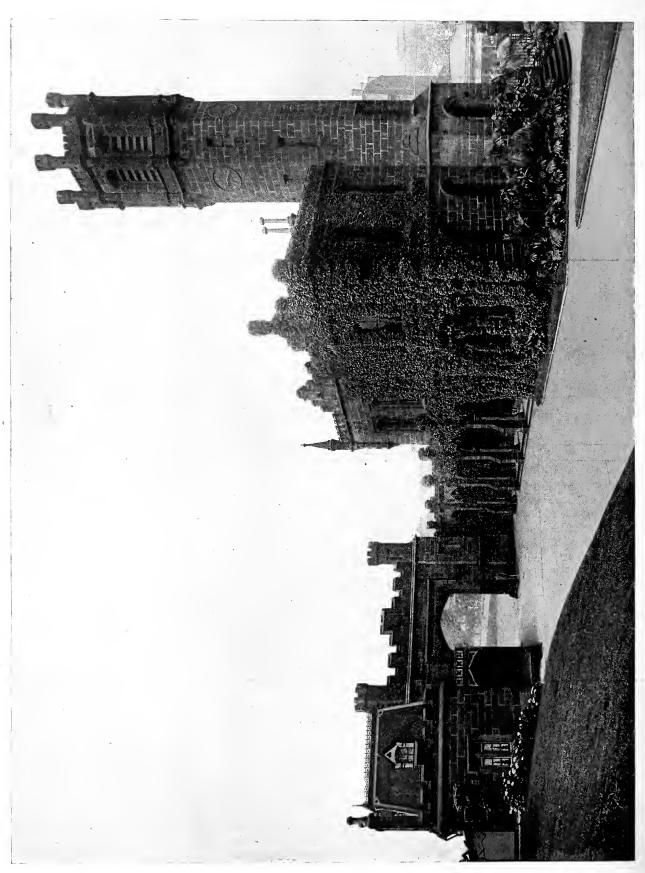
Cemetery Sentry-Box as Monument.

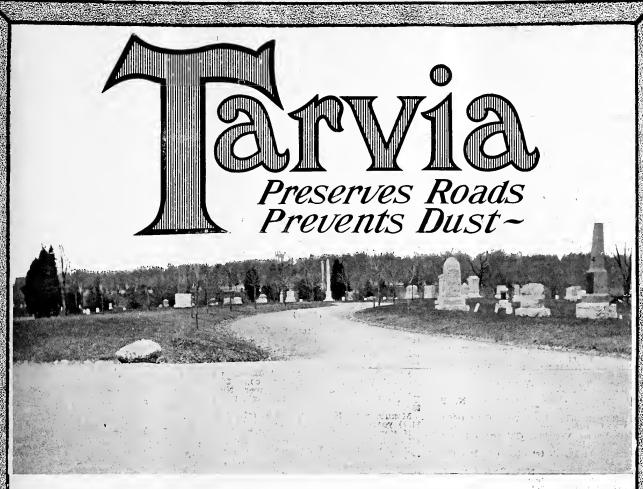
During the time, some hundred years ago, when body snatching was very common in the English cemeteries it became necessary to keep a sentry on duty at night. Some kind of shelter was required to protect the sentry from the weather, and, as ordinary wooden sentry boxes would look out of place among the tombs, the shelters were often constructed of stone, or of wood painted to represent stone, and sometimes even served as monuments. The central piece in this illustration still stands in Wanstead, Essex.



SENTRY BOX MONUMENT IN AN OLD CEMETERY.







ROADS IN NATIONAL CEMETERY, ARLINGTON, VA., TREATED WITH TARVIA-A

Tarvia for Cemetery Roads

The following is a significant excerpt from the proceedings of the Association of American Cemetery Superintendents, held at Chattanooga a few months ago.

At a session devoted to road problems, somebody inquired about Tarvia. The following dialogue took place

Mr. H. W. Ross of Newton, Mass.—"I think Tarvia makes as good a surface as

It is coming more and more into general use. Travel does not break it up and it lasts much longer, and it is not as liable to be slippery for the horses. When you get a heavy frost on the tar road it is not so hard for horses to stand as

with asphalt roads, as horses can get a better foothold on the surface."

Mr. G. L. Tilton of Graceland Cemetery, Chicago.—"We have tried Tarvia, both the surface application and also in road construction. We used what is called Tarvia 'A'—that is a surface application—and the road does very well indeed. We constructed about a mile and a half of Tarvia 'A'. Some of it has been down for three years and it is in a good state of preservation, but it ought to be resurfaced, probably next year. We did not find it at all slippery; not as much so as asphalt. It makes a road apparently as good as _____ and of much cheaper construction. We built about a mile and a half this year and the cost was 42 cents a square yard. We think it ought to last for a good many years and makes a road as good as asphalt. It is similar in appearance and is not damaged by automobiles and heavy traffic.

The President.—"That is mighty cheap construction."

Tarvia is ideal for cemetery roads, because it gives to the macadam surface the plasticity which enables them to support the transportation of heavy monuments, also because the tarviated surface is waterproof and hence dries quickly after a rain and is not muddy, being at all times suitable for pedestrian processions Tarvia reduces maintenance expense so much as to more than pay for itself.

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Cleveland London, Eng.

TOPICAL INDEX to OUTDOOR LITERATURE

An Index to articles on Gardening, Forestry, Park, Cemetery and Civic Improvement and kindred subjects in leading general and special magazines

Subscriptions will be received for any magazine or periodical at club rates with Park and Cemetery. Publications in which articles appear are listed below, and referred to by abbreviations, thus: S. L. 8:67-8, Feb. 09, means: Suburban Life, vol. 8, pages 67 8, February, 1909, Single copies should be ordered direct from the publications at addresses given below.

PUBLICATIONS INDEXED AND ABBREVIATIONS USED.

American Botanist, Joliet, Iii. (A. B.), 75c year; 20c copy.
American City, The, (Am. C.), New York, \$1.00 year; 10c copy.
American Florist, Chicago (A. F.), \$1.00

American Florist, Chicago (A. F.), \$1.00 year; 5c copy.

American Homes and Gardens, New York (A. H. G.), \$3.00 year; 25c copy.

Architectural Record, New York (Arch. Rec.), \$3.00 year; 25c copy.

Art and Progress (A. & P.), Washington, D. C.; \$1.50 yr.; single copy 15c.

Beautiful Homes (B. H.), St. Louis, \$1.00 year; 10c copy.

Canadian Florist, The, Peterboro, Ont., Can. (C. F.), \$1.00 year; 10c copy.

Canadian Municipal Journal, Montreal (C. M. J.), \$1.00 year; 10c copy.

City Hall, The, Des Moines, Ia. (C. H.), \$2.00 year; 20c copy.

Conservation, Washington, D. C. (Cons.), \$1.00 year; 10c copy.

Country Life in America, New York City (C. L. A.), \$3.00 year; single copy.

City (C. L. A.), \$3.00 year; Single 25c.
Country Gentleman, Albany, N. Y. (C. G.), \$1.50 year; 20c copy.
Century Magazine, New York City (Cent.), \$3.00 year; 35c copy.
Survey, The, New York City (Sur.), \$2.00 year; 10c copy.
Chautauquan, The, Chautauqua, N. Y. (Chaut.), \$2.00 year; 25c copy.
Craftsman, The, New York City (Cr.), \$3.00 year; 25c copy.
Embaimers' Monthly, Chicago (E. M.), \$1.00 year; 10c copy.
Fern Bulletin, Jollet, Ill. (F. E.), 75c year; 20c copy.

Fern Bulletin, Jonet, In. (F. 2.), 109 year; 20c copy.
Florists' Exchange, New York City (F. E.), \$1.00 year; single copy, 5c.
Florists' Review, Chicago (F. R.), \$1.00

Forest Leaves, Philadelphia, Pa. (For. L.), \$1.00 year; single copy, 10c. Fruit Grower (F. G.), St. Joseph, Mo., \$1.00 a year; 10c copy. Gardener's Chronicle of America, Jersey

Civic Improvements, Home Grounds

Civic Work of the Pittsburgh Chamber of Commerce, Logan McKee. Illust. Am. C., 5:12-17. July, '11. Development of High-Class Minor Streets, Chas. Mulford Robinson. Illust. L. A., 1:161-71. July, '11.

The Modeled Relief in Decoration. American Architect. New York, 99:73-6. Feb. 22, '11.

The Playground as a Social Center Mrs. Amalie Hofer Jerome. Illust. Am. C. 5:33-5. July, '11.

The Rochester Social Centers, Harriet L. Childs. Illust. Am. C. 5:18-22. July, '11.

The Woodstock Improvement Society. E. Thayer Emmons. Illust. Am. C. 5:24-7. July, '11.

The Strategy of City and Village Improvement. Geo. E. Hooker. Am. C. 5:29-33. July, '11.

Gardens and Landscape Gardening

Italian Renaissance Gardens. W. G. K. 13:129-30. Arntz. Illust. July, '11.

Philadelphia's Beautiful Suburbs. Illust. G. C. A. 13:88-9. July, '11.

D ABBREVIATIONS USED.

City, N. J. (G. C. A.), \$1.00 year; single copy, 10c.

Garden Magazine, New York City (G. M.), \$1.00 year; single copy, 15c.

Gardening, Chicago (Gard.), \$2.00 year; single copy, 10c.

Gartenkunst, die, Frankfurt, Germany (German), G. K., \$4.00 year; 50c copy.

Good Roads Magazine, New York (G. R. M.), \$1.00 year; single copy. 10c.

Horticuiture, Boston (Hort.), \$1.00 year; single copy. 5c.

House Beautiful (H. B.), Chicago; \$3.00 year; 25c copy.

House and Carden, Fhiladelphia (H. G.), \$5.00 year; 50c copy.

House and Garden, Fhiladelphia (H. G.), \$5.00 year; 50c copy.
Independent, The, New York (Ind.), \$3.00 year; 25c copy.
Landscape Architecture (L. A.), Harrisburg, Pa.; \$2.00 year; 50c copy.
Meehan's Garden Builetin, Germantown. Philadelphia (M. G. B.) 50c year; 5c copy.
Minnesota Horticulturist, Minneapolis (M. H.), \$1.00 year; single copy, 10c.

5c copy.

Minnesota Horticulturist, Minneapolis
(M. H.), \$1.00 year; single copy, 10c.

Moeller's Deutsche Gaertner-Zeitung,
Erfurt, Germany, (German), M. D. G.,
\$3.00 year; 10c copy.

Municipal Engineering, Indianapolis,
Ind. (M. E.), \$3 00 year; single copy, 25c.

Municipal Journal and Engineer, New
York (M. J. E.), \$3.00 year; single copy,
25c.

25c.
Monumental News, Chicago (M. N.), \$1.00 year; single copy, 10c.
National Nurseryman, Rochester, N. Y. (N. N.), \$1.00 year; single copy, 10c.
Pacific Municipalities, San Francisco (P. M.), \$1.00 year; loc copy.
Revue Horticole, Paris (Rev. Hort.), French, \$4.50 year; 50c copy.
Scientific American, New York (Sci. Am.), \$3.00 year; 10c copy.
Suburban Life, New York (S. L.), \$3.00 year; \$25 copy.

year; 25c copy.

Survey, New York (Sur.), \$2.00 year;
10c copy.

Woodland and Roadside, Boston (W. R.),
50c year; single copy, 10c.

Railroad Gardening a Paying Investment. Paul Huebner . Illust. A. F. 36:1278-80. July 15, '11.

Rustic Effects in the Garden. Herman Lips. Illust. S. L. 13:85-6. Aug., '11.

Transforming a Swamp. Geo. V. Nash. Illust. G. C. A. 13:73-6. July, '11.

Parks, Cemeteries and Public Grounds

"Cleopatra's Needle"-The Bronze Supports. Mary H. Warren. Illust. A. & P. 2:288-291. Aug., '11.

Competitive Designs for the Extension of the Zoological Park in Berlin. Illust. (German.) M.D..G 26:281-6. June 17, '11.

Competitive Plans for the Extension of the Zoological Gardens in Ber-P. Dannenberg. lin. (German.) G. K. 13:125-9. July,

Modern Meditations Among the Tombs. Harold A. Caparn. Illust. L. A. 1:172-80. July, '11.

New Park on Site of Old Fortifications in Erfurt. Max Bromme. Illust. (German.) M. D. G. 26:-277-80. June 17, '11.

Village and Small City Cemeteries. Walther Kiehl. Illust. (German.) G. K. 13:119-20. July, '11.

Trees, Shrubs, Plants, Etc.

A Book About Weeds. C. G. 76:-604. June 29, '11.

A New Idea in Plant Propagation. Robt. A. Sanborn. Illust. G. M. 14:20-21. Aug., '11.

Fertilizers. W. S. McGee. A. F. 36:1281-2. July 15, '11.

History of Attempted Federal Legislation Providing for Inspection of Foreign Nursery Stock. Wm. Pitkin. N. N. 29:261-4. July, '11.

Low Grade Fertilizers are Expensive. F. E. 32:130. July 22, '10.

National Sweet Pea Society of America. Illust. F. E. 32:61-63. July 8, '11.

New Spray Mixture. J. Lee Hewitt. F. G. 22:6. July, '11.

Nursery Stock Inspection. F. E. 32:23-4. July 1, '11.

Private and Municipal Forests in J. A. Ferguson. Pennsylvania. For. L. 13:37-9. June, '11.

Pennsylvania's Problem in Forestry. S. B. Elliott. For. L. 13:41-6. Tune, '11.

Some Ideas for Better Hedges and Fences. W. S. Rogers. Illust. G. M. 14:16-18. Aug., '11.

Stump Burning. J. L. Ashlock. Illust. C. G. 76:4. July 6, '11. Some Trees of Formal Habit. L. A.

1:181-4. July, '11.

Soil Improvement and Irrigation on Boston Common. F. L. Olmsted. L. A. 1:186-96. July, '11.

The St. Louis Convention of Ameriern Assn. of Nurserymen. Illust. N. N. 29:249-54. July, '11.

The Nurseryman and the Entomologist. S. J. Hunter. N. N. 29:265. July, '11.

The Climbing Rose. E. E. Rexford. Illust. C. G. 76:6. July 13, '11. Vines for Veranda Decoration. W. C. McCollom. Illust. G. M. 14:12-13.

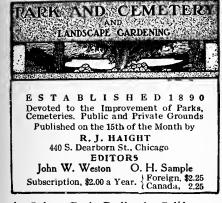
Aug., '11.

PERSONAL

Mr. W. B. Hatch, Nayatt, R. I., is engaged on the improvement of a three hundred acre tract for the Rhode Island Improvement Club from plans by Olmsted Bros. of Boston.

Mr. Carl E. Kern, an assistant of Mr. Wm. Salway superintendent of Spring Grove Cemetery, Cincinnati, O., is taking a two months' vacation to visit his parents at his old home at Horn, Switzerland.

The plans for the development of (Continued on page VI.)



the Sylvan Park, Redlands, Calif., prepared for the Park Commission of that place by Wilbur Davis Cook, Jr., landscape architect, of Los Angeles, have been approved and accepted by that body.

PUBLICATIONS RECEIVED

U. S. DEPARTMENT OF AGRICULTURE-Farmers' Bulletin 457, Experimental Station Work 64. Contents: Low Grade Fertilizers: Japanese Cane for Forage; Fighting the Boll Weevil; Hastening Maturity of Corn with Fertilizers; The Scuppernong; Early Spring Lambs; Production of Sanitary Milk; Lacto: a Frozen Dairy Product; A Reinforced Brick Silo.

Office of Public Roads-Circular No. 95. Special Road Problems in the Southern States, by D. H. Winslow, Superintendent of Road Construction, Office of Public Roads.

Purdue University Agricultural Experiment Station, Lafayette, Ind. Bulletin No. 151, Vol. XV. Commercial Fertilizers

Forestry.—Sixteenth Annual Report of the Forestry Commissioner (formerly Chief Fire Warden) of Minnesota. For the year 1910. Gen. C. C. Andrews' report discusses the forest fire problem and offers a number of recommendations of value, especially one regarding the enforcement of forest fire laws. The report contains the new forestry law, which appropriates \$75,000 annually for each of the next two fiscal years for the forest service and which authorizes the appointment of a State Forester by the Forestry Board, he to appoint an assistant forester, and which abolishes the town fire warden system. It also contains sketches of forestry in twenty European countries, and a number of illustrations. It appears that the proposed amendment to the constitution for a tax of one-fifteenth of a mill for reforestation received 100.168 votes, but lacked 55,010 votes of being adopted.

TRADE PUBLICATIONS

Catalogue No. 5 of the Bomgardner Manufacturing Co., Cleveland, O., illustrating and describing the Bomgardner Improved Telescope Lowering Device. Instantaneous Folding Church Truck, Adjustable Pedestal and Depot Truck.

Wholesale Catalogue of The Nippon Engel Kaisha, Ltd., Kawanishi-Mura, Ikeda, Settsu, Japan. A comprehensive illustrated catalogue of the extensive list of Japanese and other plants, bulbs and seeds grown by this firm. An interesting collection.

PUBLISHER'S NOTES

The Quadriga Mfg. Co., in addition to manufacturing Bronze Perpetual Care Stakes for marking cemetery lots under perpetual care, are also making Ash Urns of genuine Antique Bronze for crematoriums, columbariums, etc. The urns are cast in one solid piece with a three-inch opening. A neat handle securely fastened to the cover screws into the urn and seals it perfectly tight. These urns, we are informed, are in use at Oakwood Cemetery Crematorium, Chicago. Photographs and further particulars may be had by addressing the Quadriga Co. at 119 N. Canal street, Chicago.

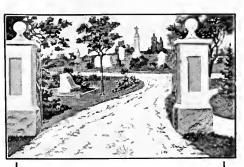
The Hoosier Cement Burial Vault Molds WI I KE BALL & BROOKSHIER OUT B PLAT

All steel, no wood to shrink, swell and warp, always ready, without repairs and good for a lifetime. Hest cement proposition known, 500 per cent PROFIT. Telescopes and adjusts for making twenty sizes of sinks, bath-tubs, tanks and vaults with circle corners, preventing cracks. Corners strongest portion of walls.

Agents Wanted. For particulars address BALL & BROOKSHIER, Patentees & M'f'rs, Thorntown, Ind.

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to make friends for Park and Cemetery by patronizing its advertisers and by giving the paper credit for the introduction when corresponding



Don't Hoe Weeds

When you cut or pull a weed you simply get rid of that one - and not even that unless you get the root. You don't get those just ready to pop out of the ground.

And, besides it's too slow and hard to keep walks and drives clear of grass and weeds

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Invaluable for Parks, Cemeteries, and Large Estates.

Estates.

One gallon of Herbicide and forty gallons of water applied with any kind of sprinkling device will keep 200 feet of a 5-foot path clean of weeds for years. Sold in

5 gallon casks \$5.5010 gallon casks \$10.00 48 gallon bbls. \$35.00, F.O.B. New York City Our Booklet "The Weed Problem Solved"
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JUST PUBLISHED

CONCRETE POTTERY AND GARDEN FURNITURE

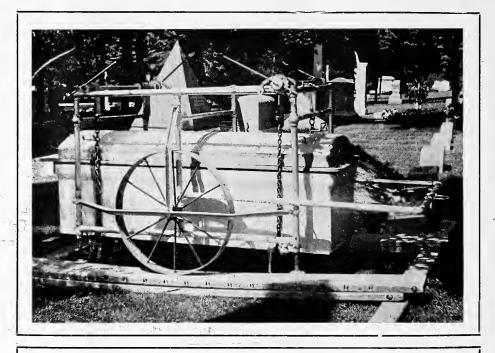
By RALPH C. DAVIDSON

16mo. (5¼ x 7½ inches). 196 pages. 140 illustrations.

THIS work should appeal strongly to all of those interested in ornamental concrete as the author has taken up and explained in detail in a most practical manner the various methods of casting concrete into ornamental shapes. The author has taken for granted that the reader knows nothing whatever about the material and has explained each progressive step in the various operations throughout in detail. These directions have been supplemented with half-tones and line illustrations which are so clear that no one can misunderstand them.

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HE above cut shows a special truck for the handling of cement vaults, and also for disinterring purposes. It will be noticed that the truck can be placed over a vault, and the vault raised up into the frame, and by hitching it to a conveyance of any kind, it can be taken to the grave, and successfully placed over the grave, and the vault low-

ered into it, as simply as the ordinary casket can be lowered

into the grave with a lowering device.

It is supplied with ratchets and brakes, so that there is no chance for a mishap of any kind. For disinterring purposes, there is a set of hooks, which hook under the rough box or casket, and it can then be drawn up into the frame and moved to any part of the cemetery and reburied.

Two men are all that are required to handle any size

interment or removal.

Photographs showing this device in operation from many different views will be forwarded on application. The demand for our elevator for mausoleums is most satisfactory.

Write the

Bomgardner Mfg. Company

Corner Detroit & Hird Sts., Cleveland, Ohio for particulars.

11

PARK NOTES

(Continued from page 615)

Vinton, Ia., has recently held an election upon a proposition to purchase a park. It carried by a substantial majority.

Through a donation of land, which will be made at an early date by Horace Williamson and B. M. Campbell, the city of Youngstown, O., will comes into possession of about 15 acres of land adjoining South Side Park which will make an excellent addition to the South Side Park, inasmuch as the greater part of it is covered with trees, which will tend to make up for the inadequate shade the park now affords. With this addition the park will comprise about 22 acres and can be converted into an ideal pleasure spot. The name of Williamson Park will be suggested to the Park Commission as a courtesy to Horace Williamson, who will be one of the donors of the land. Mr. Williamson has also done much toward advancing the civic conditions of that section of the

Under the plans of Commissioner Thompson of the Department of Water Supply, New York City is to get a remarkable new park space. This park will be on top and a part of the plant that is to be built in the easterly basin of the Jerome Park reservoir for the filtration of the water of the Croton watershed. The park space is to be only incidental to the construction of the filtration plant, which is to be covered in order to prevent dirt from getting into the water. It is estimated that it will take about four years to complete the work, by which time it is probable that the reservoir park will be made accessible by one of the new transit lines proposed in the report adopted recently by the Board of Estimate.

Plans have been submitted to the Park board of New Bedford, Mass., for proposed changes at Brooklawn and Hazelwood parks. At Brooklawn park it is proposed to dig a large pond, some two acres in area, the larger part to be used in winter for skating and the smaller part to be used in summer as a wading pond for the children. At Hazelwood park, the changes proposed are in the remodeling of the old Lucas house as a comfort station. The house will be made over to contain waiting rooms and lavatories.

(Concluded on page VIII)

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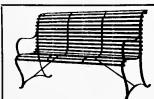
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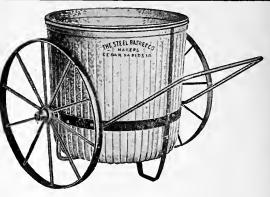
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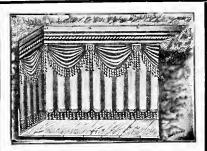
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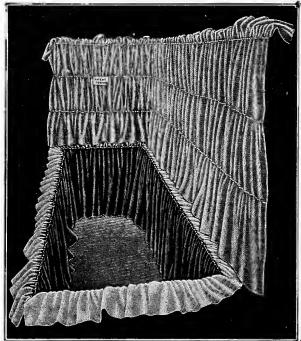
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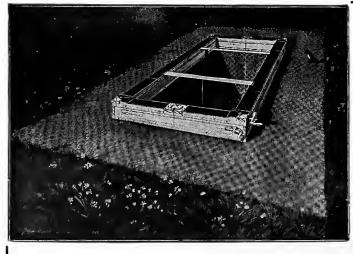
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CEMETERY NOTES

(Continued from page 626)

Some months ago the city council of Waukesha, Wis., passed a resolution ordering the purchase of thirty-three acres of land which joins the Prairie Home Cemetery on the south, this land to be used for burial purposes also. As this land belonged to the state it was necessary for the legislature to pass a bill authorizing the sale.

The Sumter Cemetery Association, Sumter, S. C., has added 13 acres to its holdings for future burial purposes.

The Board of Managers of Crown Hill Cemetery, Indianapolis, Ind., will prepare the land north of the present its holdings for future burial purposes.

Old Oakwood Cemetery, Richmond, Va., is to be enlarged by the purchase by the city of some 65 acres of ground at a cost of \$53,800. This will almost double its present area.

The beautiful chapel in Fairview cemetery, Chicopee, Mass., which has been erected as a memorial to its giver, Mrs. Sarah E. Spaulding, was recently turned over to the city and formally dedicated with appropriate ceremonies. Mrs. Spaulding, at her death, left \$12,000 for the erection of such a chapel, as she had always felt that the cemetery was lacking in appropriate conveniences for funeral ceremonies, and the chapel has just been completed. It is of Grecian design, with a number of very handsome stained glass windows. It has a seating capacity of about 100, and is 48 by 28 feet.

Contracts have been awarded for the building of a reinforced concrete wall, seven feet high, around three sides of the old Mortimer Cemetery, Hartford, Conn., which for years has lain in utter neglect. On the fourth side, fronting Liberty street, an iron picket fence will be built, with secure iron gates which will be kept locked in future.

Under instructions from the office of the quartermaster general of the United States army at Washington, plans and specifications will be at once prepared for the cutting of an archway in the wall which divides the Confederate and National cemeteries and for extensive improvements in the grounds of the former at Springfield, Mo. A gateway from sixteen to eighteen feet in width will be made midway of the dividing wall. The confederate cemetery is to be improved.

An artificial lake is to be constructed in Melrose (Mass.) cemetery.

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PARK NOTES

Concluded from Page VIII

The board of park commissioners of Rockford, Ill., will honor the memory of the noted Indian Chief Black Hawk, by naming the newly acquired 80 acre park tract after him. In Fairgrounds' park a swimming pool is to be made, and the gymnastic accessories for physical exercise have been also installed.

The Depot Park at Albany, Oregon, will be maintained hereafter by the Southern Pacific Company. The park was established by the Ladies' Auxiliary of the Albany Commercial Club, under whose direction the ground was laid out and planted. The railroad company will place a man in charge to maintain the park, which adjoins the union depot, and makes a convenient resting place for travelers.

The Essex county, N. J., park commission have begun work on a large field house to cost \$10,000 on the Maple avenue park tract in Montclair. The commission has taken over the tract and will expend in the neighborhood of \$85,000 in beautifying it and providing playgrounds and other places of recreation to make a wellrounded useful park.

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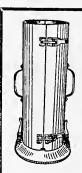
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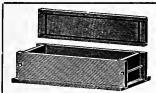
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CAVE HILL CEMETERY

Continued from page 620

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Sunday funerals are allowed in Cave Hill, but the order for the same must be received prior to four o'cock on Saturday. The receiving tomb and the chapel are very imposing and cost \$22,240.00. The capacity of the receiving tomb is eighty, while the chapel has a seating capacity of one hundred. The receiving tomb, a great portion of which is built under ground, is of Bowling Green stone, with vestibule of white marble. The chapel is erected with Bedford, Indiana, limestone and is heated by steam.

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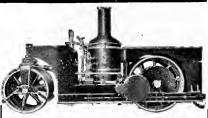
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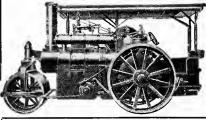
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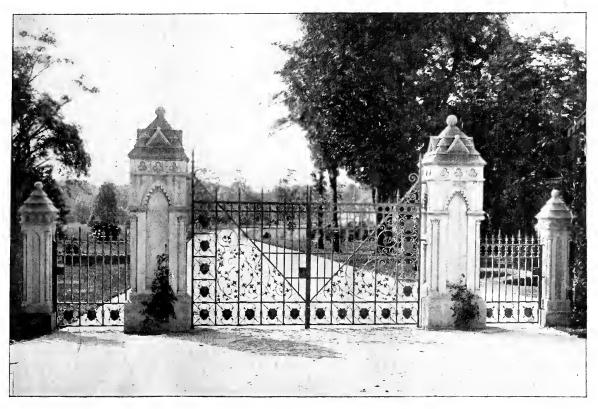
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SEPTEMBER, 1911





WINTON ROAD ENTRANCE TO SPRING GROVE CEMETERY, CINCINNATI; See page 653,

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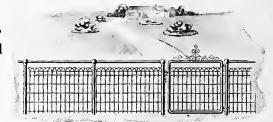
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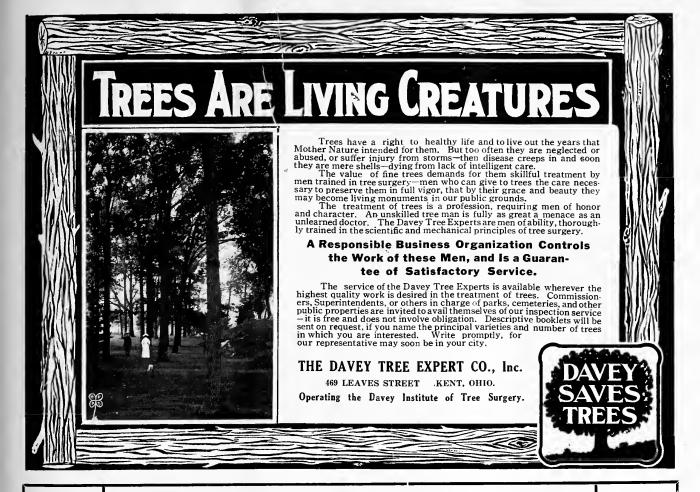
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PARK AND CEMETERY

AND LANDSCAPE GARDENING_

Vol. XXI Chicago, September, 1911

No. 7

The Philadelphia Convention of the A. A. C. S.

The twenty-fifth annual convention of the Association of American Cemetery Superintendents, which has just concluded its proceedings at Philadelphia, and of which a full account is given in other columns, probably surpasses in general interest any of its former annual gatherings. It is hard to conceive that any organization of its character could do more for the permanent benefit of its country in twenty-five years of existence than what has been accomplished by the cemetery superintendents' association. It is not too much to say that its influence has very materially contributed to the progress of landscape development throughout this broad land, and the program prepared for this recent convention emphasized the fact that the educational idea is still paramount as an essential principle of the association's work. While most of the leading cemeteries of the country and many smaller ones are represented in the ranks of its membership, to effectively reach the cemetery managements of the latter is still a serious problem. However, there are signs of progress in numerous smaller burial grounds, showing that the leaven is working, and it may be happily assumed that every year will witness a more rapid advance in the improvement of the rural cemetery.

Public Comfort Stations

While many of the larger cities are giving more or less attention to providing "public comfort stations," notably Washington, San Francisco, New York, Chicago, etc., this very necessary municipal problem is still very much in the background. It might be said that in this respect, we are away behind the up-to-date modern municipality in foreign countries. It is quite an expensive proposition at this late day, but altogether an essential one, and no city-planning or city-improvement scheme should be admitted to serious consideration that does not possess adequate provision for such conveniences. From both the sanitary standpoint and also that of appearances such structures in our public parks have usually been reflections on the management, and totally unworthy of the environment; whereas it is quite possible, even when isolated buildings, to make them architecturally attractive and to harmonize with the surroundings. The same strictures apply in a greater or less degree to our larger cemeteries; the need of such public accommodations is really more important than provisions for other natural requirements and therefore should certainly receive the necessary attention.

Renewed Activity in the Billboard Problem

The bill passed by the recent New York legislature, and which became operative on September 1, by which the wayside scenery of the state might be cleaned of billboards and such forms of advertising, resulted in an active campaign on the part of the Automobile Club of America, and other associations interested, to rid the highways of obnoxious advertising. A large amount of legal destruction has already been accomplished, and so far as public thoroughfares are concerned, there is no reason, under such a law, for any commercial signs to

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be seen in the future in New York state. If all the states could be induced to pass fairly and justly restrictive legislation on this phase of public advertising, a solution of the property rights versus public welfare problem, as it relates to the very obnoxious billboard, would soon be reached. It is very unfortunate that court decisions on the question should differ so widely, and it would seem that such differences should not exist. The Tacoma way of revoking the licenses of dealers selling liquors, beer or other intoxicants which were advertised on billboards within the city limits, is worthy of consideration in other communities.

Park Conditions in New York City

New York City's parks are publicly talked of as a disgrace, and while the park commissioner admits the facts he claims that he is "doing his best." Realizing the political conditions which have usually controlled the public works affairs of that city one does not wonder, and may often indulge in the wish that park conditions may remain just so bad until the citizens gather strength enough to demand a change, and that the money contributed by them for municipal purposes shall be intelligently and honestly administered. The nation's so-called metropolis is woefully behind in both the care and development of its park system as a whole. As a city it does not seem to understand the purpose of parks under modern intelligence, and there is no doubt whatever, as between the two cities, Chicago could give New York some valuable information on the subject as well as show results from far better methods. The people of Chicago are alert nowadays to prevent malign influences from interfering with their parks, as was evidenced in the recent public condemnation of certain appointments made in park officialdom, in the West Side and Lincoln Park systems. "Keep off the grass" signs are much too much in evidence in the New York parks, which belong to the people after all, and children's playgrounds are few and far between as it were. It is to be hoped that the new superintendent may be able to stem the unfortunate prevailing current.

Value of Attending Conventions

It is a matter of frequent comment that at so many important association conventions the attendance of members and others interested is not what should have been expected, or possibly what it might have been had the importance of the gathering and the information to be obtained been seriously considered. At the meeting of the American Association of Park Superintendents at Kansas City, which was recorded in the August issue, the attendance was far from what might have been expected, and could the park commissioners and officials of the country have realized the inspiration and instruction, which must necessarily result from the opportunity that was presented of examining a park and boulevard system that in many respects is unequaled anywhere, we have no doubt of its effect. The benefits always to be derived from an interchange of ideas on subjects of common interest with men of wide experience in park development and management, and all that broad subject stands for today, should be a compelling influence on the attendance, and it is a short-sighted policy on the part of the officials "higher up" that they do not interest themselves more seriously in convention matters.

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GROWTH OF SEATTLE'S GREAT PARK SYSTEM

While the beginning of park development in Seattle dates back to 1884, when D. T. Denny and wife gave to the city its first park, Denny Park, then known as Seattle Cemetery, and the first Park Board was appointed to look after the removal of bodies from the cemetery, the real working period of the department began in 1903.

Prior to 1900 the entire park area of the city consisted of Denny, Kinnear and Volunteer Park with other small unimproved tracts, an area of 78 acres, with not a single playground or a foot of driveway or boulevard. In 1900, the City Council purchased Woodland and Washington Parks. Considerable public interest aroused and there seemed to be a general awakening to the fact that Seattle had an opportunity to establish a world famous park and boulevard system.

The first step in this direction was the employment of Olmsted Brothers, landscape architects of Brookline, Mass., to prepare plans for a complete park, playground and boulevard system. Mr. J. C. Olmsted, senior member of the firm, spent several weeks during the summer of 1903, going over the ground thoroughly and submitting a complete comprehensive report and plan which was adopted by the City Council, October 19th, 1903, after having been approved by the Park Board.

Under an amendment to the city charter the control and jurisdiction of all park areas in the city was vested absolutely in the Board of Park Commissioners and it was provided that an annual tax levy of not less than three-fourths of one mill should be levied for park purposes and that this revenue as well as ten per cent of all the licenses and fines collected by the city, should be placed in a City Park Fund, which fund can be expended only by the Park Board.

With the establishment of the Park Board on a firm basis, a marked change took place, the existing park areas were improved and beautified and became so popular with the peo-

ple that public sentiment demanded that the system be extended by the acquisition of additional areas, in accordance with the Olmsted Plan. As the annual revenues would not be sufficient to permit of this, a bond issue of \$500,000 was submitted to a

authorized. This sum was evidently expended to the satisfaction of the people as the demand for further extension and improvements increased and in 1908 a bond issue of \$1,000,000 was submitted to a vote of the people and carried by a sweeping majority. vote of the people in 1906 and was This gave the Board ample funds



WOODLAND PARK'S STATELY FIRS, SEATTLE, WASH.

with which to get the system in shape for the Alaska-Yukon-Pacific Exposition in 1909 and some very extensive improvement work was carried on including the construction of the Lake Washington Boulevard system from Mt. Baker Park to the Exposition Grounds. The work accomplished by the expenditure of these funds, brought the citizens of the city to a realization of the possibilities of the Olmsted Plan and public sentiment demanded that the work proceed. The Board, therefore, again submitted a further bond issue in 1910, this time in the sum of \$2,000,000, which was by the vote of the people duly authorized and supplied the necessary funds for improvements and extensions for 1911-1912.

Prior to 1904, the city possessed six improved parks, no boulevards and no playgrounds. The year 1911 finds it with sixteen improved parks, twelve improved and equipped playgrounds, and fifteen miles of improved boulevards and parkways. The total expenditures to January 1st, 1911, on Seattle's park system amount to \$2,696,246.54, while its appraised valuation is \$6,410,755.91. The total expenditure for 1910 was \$704,667.53.

The handsome illustrated report of the Board recently issued summarizes the chief improvements in 1910 as follows:

Volunteer Park received the most extensive treatment during the year, the formal gardens, lily ponds, walks and drives, music pavilion, comfort stations and children's shelter being constructed at a cost of \$30,922.95.

Woodland Park received second consideration, the new animal house, progress on the new athletic field and general improvement work, totalling \$19,703.64.

Roanoke Park, a small unimproved tract in the Denny-Fuhrman Addition, was beautified as a neighborhood park at a cost of \$6,449.05.

Any unimproved portion of Mt. Baker Park was improved and a public boathouse and pier were constructed at a cost of \$7,900.14.

At Jefferson Park, on Beacon Hill, a considerable amount of clearing of this wooded tract was accomplished and a greenhouse and propagating plant for the department were established, the total expenditure being \$4,371.76.

The City Council turned over to the Park Board an appropriation of \$10,000.00 to be used in the care of the former Exposition Grounds, until the state legislature should meet and provide for it.



ON LAKE WASHINGTON BOULEVARD, SEATTLE, WASH.

In the matter of playgrounds, the department made remarkable progress, this feature of the system being more than doubled during the year. In 1909 there were seven playgrounds, four of which were improved and supervised. In 1910 nine additional sites were acquired. Seven sites were improved and made available for use and five grounds were supplied with apparatus and equipment. Seven grounds were supervised and in operation during the season.

During the year \$51,902.95 was expended for playground improvements, apparatus to the amount of \$9,419.23 was installed and \$164,668.88 was expended on new sites.

Superintendent J. W. Thompson in his annual report, gives the Board

the following excellent advice concerning playground development:

In connection with the rapid progress we are making in the development of our play-grounds, I would call your attention to a mistake which I believe we are making in the installation of apparatus on grounds which are otherwise lacking in essential features. I mean by this, that the first essential feature of an improved playground is a Shelter House with tollet facilities. Apparatus and equipment should not be installed until the Board is prepared to maintain supervisors or caretakers, as an unattended playground is a menace to a community.

I further believe that our playgrounds should be enclosed so that they cannot be used as a rendezvous of the rowdy element during the hours when they are not in charge of a caretaker. I believe that it is better that we should have fewer playgrounds than to have a large number inadequately equipped or supervised.

Alki Bathing Beach, a tract of approximately 10 acres, has just been





acquired by the city and improvements planned contemplate a general clearing up of the beach and the construction of an imposing bathing and recreation pavilion.

Bailey Peninsula, of 193.76 acres, a magnificent natural park, extending into Lake Washington, after several years of effort in connection with negotiations, has at last become the property of the City of Seattle by the condemnation route, its cost footing up \$322,020.50. It is the most extensive and most expensive subdivision of the park system, but time will demonstrate that no mistake was made in acquiring it. It retains its original growth of virgin timber and vegetation, and can be converted into one of the most unique and beautiful natural parks in the world. At present it is practically inaccessible except by water, but the extension of

the Lake Washington Boulevard along the lake shore south from Mt. Baker Park will overcome this difficulty in time.

Leschi Park, located on the shore of Lake Washington, is one of the oldest parks of the city, but until 1909 was the property of the street railway company. Being a lake shore park and only fifteen minutes from the business district, it is one of the most popular and best patronized parks of the system.

Woodland Park, containing 179 acres, is the city's largest park, and on account of its varied attractions, is the most popular and is visited by more people than all of the other parks of the city.

Interlaken Boulevard extends 7,800 feet from Capitol Hill, down the hill, serpentine fashion, through wooded Interlaken Park, to a connection with

the main north and south boulevard in Washington Park. This is the entrance .to the boulevard system.

Lake Washington Boulevard, 6,100feet, is the section of the system extending along the lake shore from Colman Park, to Dodge's Point. With the magnificent water and mountain view on the one side and the wooded slopes of Mt. Baker Park on the other side, this is the most attractive section of the entire boulevard system. Having been completed the year previous, the work of 1910 consisted of the removal of slides and the construction of retaining walls on the park side and the reconstruction of several hundred yards of sea-wall and cement sidewalk on the lakeside, which were washed out by the high water and storms of Lake Washington during the previous winter.

RAILWAY GARDENING ASSOCIATION MEETING

The fifth annual meeting of the Railway Gardening Association held in Chicago August 15-18, 1911, was attended by representatives of twenty or more of the principal trunk line railroads in the United States and Canada.

The object of the Association is primarily "to consider a more thorough and systematic extension of Railway Gardening; to improve the appearance of all railroad way lands, especially those adjacent to passenger stations; to encourage the beautifying of grounds adjoining railroad property; to eliminate whatever unnecessarily detracts from the beauty of the landscape as seen from the car window; to stimulate universal interest in presenting more attractive appearances to the traveling public."

The membership is constantly increasing and will continue to grow as the good work of the organization is brought to the attention of the officials of those railroads that have not as yet realized the value of improving their station grounds and rights of way. An excellent programme was carried out at the meeting and included the following papers:

"Uniformity in Railroad Gardening and How to Bring it About," by E. A. Richardson, Boston & Albany R. R

"Interesting Railroads in Beautifying Their Station Grounds," by N. S. Dunlop, Canadian Pacific R. R.

"Fences, Including Hedges, Where to Use; Material, Maintenance," Etc., by Joseph Carson, Pennsylvania R. R. "Sodding and Seeding Lawns, Comparative Value, Best Time to Do It, Material," by R. J. Rice, Michigan Central R. R.

"The Gardener's Jurisdiction; How Far Beyond the Park Fence Should It Extend?" by R. W. Hutchinson, Pennsylvania R. R.

"Hardy Herbaceous Perennials in Landscape Work," by W. H. Waite, Vaughan's Nurseries, Western Springs, Ill.

"Should Railroad Companies Purchase or Grow Their Stock?" by F. W. Vail, Central of New Jersey, R. R.

"Treating Cuts and Banks to prevent Washing and Sliding," by H. S. Moulder, Illinois Central R. R.

"Fertilizers," by J. A. Byrne, Baltimore & Ohio R. R.

"Maintaining of Parks During Drought," by J. E. Smith, Pennsylvania R. R.

R. D. Prettie, Superintendent of Forestry, Canadian Pacific R. R., Winnipeg, Man., gave an interesting account of the excellent work being done by that railroad.

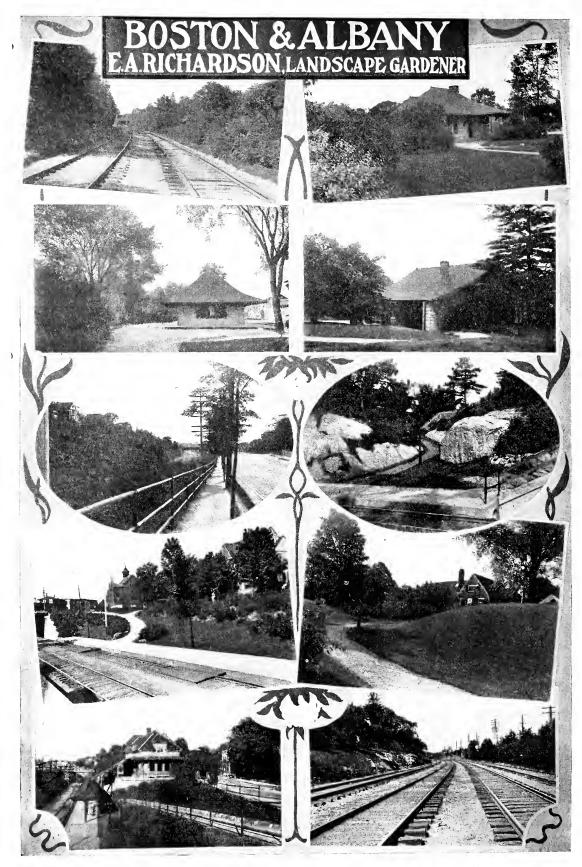
The entertainment provided by the local committee, of which Geo. B. Moulder, chief gardener of the Illinois Central R. R., was chairman, was of such a nature as to combine both pleasure and profit, a portion of each day being devoted to sight seeing. The Chicago Florist's Club provided automobiles for a tour of inspection over Chicago's park and boulevard system. The Chicago, Burlington & Quincy R. R. furnished transportation to Western Springs, Ill., where the party inspected the greenhouses and

nurseries at Vaughan's Seed Store, and the Michigan Central R. R. took the visitors and their wives to Niles, Mich., where they saw one of the prettiest station grounds on that line and were entertained by Chief Gardener John Gipner and R. J. Rice, local station gardener.

Officers clected for the ensuing year were: President, Patrick Foy, Norfolk & Western R. R., Roanoke, Va.; vice-president, F. M. Vail, Central R. R. of New Jersey, Dunellen, N. J.; secretary-treasurer, J. S. Butterfield, Mo. Pacific-Iron Mountain R. R., Lee's Summit, Mo.; executive committee, the officers and Geo. B. Moulder, Ill. Central R. R., Chicago; R. B. Hutchinson, Pennsylvania Lines West, Sewickley, Pa.; R. J. Rice, Michigan Central R. R., Niles, Mich.

The 1912 meeting will be held at Roanoke, Va.

The 1911 edition of the Souvenir year book, issued as a medium through which to enlist the attention and co-operation of railroads in the work of the Railway Gardening Association, is a beautifully printed and artistically illustrated book. Half-tone group pictures like the one on the next page illustrate the improvement of station grounds and rights of way, etc., on a number of railroads interspersed with a historical sketch of the association, a number of addresses on different phases of the subject of railway gardening by members of the association, making a volume that cannot fail to create a favorable impression.



SOME FINE EXAMPLES OF RAILROAD GARDENING ON THE BOSTON & ALBANY.



The Board of Park Commissioners, Seattle, Wash., have issued a neatly illustrated pamphlet for the purpose of exploiting the park, playgrounds and boulevard systems of the city, which it believes will be an important factor in making Seattle famous. It gives the acreage of all the parks, neighborhood parks, playgrounds and boulevards, with instructions how to reach them.

The Board of Park Commissioners of Salt Lake, City, Mo., sent an exhibit of photographs to the park superintendents' convention at Kansas City last month. The exhibit bore this legend:

Salt Lake City, Utah, has
The Best Climate in the World
The Best Land in the World
The Best City in the World
The Best People in the World
excepting the Kansas City (Mo.) people.

John W. Duncan is making good progress with his work at Spokane, Wash., notwithstanding certain drawbacks that are temporarily retarding park development. Roses grow at a most remarkable rate there and the numerous native perennials are a joy to the gardener. Mr. Duncan promises Park and Cemetery readers some interesting news before long.

A number of the members of the American Association of Park Superintendents who attended the convention at Kansas City, last month, extended their trip to Colorado Springs, Colo., where they were entertained by the Park Commission of that place.

A new chapter has been opened up in the history of Jacksonville, Fla., by the adoption of the new city charter and the approval of the park and boulevard system. A great stimulus has been given to improvement plans.

Renssalaer, N. Y., is said to have more billboards than any other place of its size in the country, and the council is contemplating ordinances to abolish them.

Condemnation proceedings have been begun by the park commission to clear up the title of a number of lots bordering on the present southern boundary of Sinnissippi Park, Rockford, Ill., which the commission sought to purchase some time ago.

New York has some 225 different parks, covering more than 12,000 acres, for which it has expended about \$50,000,000, and it affords an unanswerable argument in favor of parks as paying municipal investments, for at the ordinary valuation of real estate in their neighborhood they would now be worth more than \$2,500,000,000. Central Park, which has \$13 acres, was bought for \$5,028,-344 in 1856, and is now worth at least \$500,000,000 for building sites.

The cost of maintaining the entire series of parks included in the well known Essex County Park System of New Jersey for 1910 was \$186,286.99. This was \$441.61 less than the receipts of the commission for maintenance. For the construction account, including proposed new parks and improvements to those previously established, there was received \$618,267.91, but of this only \$171,427.60 was spent during the year.

The State of Wisconsin has made the first payment toward the purchase of a state park at Devils Lake, near Baraboo. A check for \$10,000 was given to Millie B. Dyke and Ida B. Ringling, of Baraboo, for a tract of 120 acres.

Two propositions for parks and playgrounds in Queens Borough, N. Y., Long Island, now have the attention of the Queens Committee on Parks and Playgrounds which was recently organized to look after this important proposition in the borough. The propositions to be taken up are the Seaside Park at Rockaway Beach and the laying out of a playground under the Queensboro Bridge.

The Commercial Club of Biloxi, Miss., has decided to ask the city council to take action against alleged squatters on the naval reserve lands, given the city by the Federal Government for park and cemetery purposes, in order that these lands might not be made liable to forfeiture.

Considerable criticism has been made on the park board of Atlanta, Ga., on account of a recent drowning at Piedmont Park, a catastrophe which might have been averted had the park been supplied with life saving facilities.

Mr. Charles Downing Lay, the successor to Samuel Parsons, Jr., in the New York City park system, has been placed in charge of the work of re-

storing Central Park along the lines recommended by Gustavus B. Maynadier, the soil expert of the Department of Agriculture. In all \$150,000 will be appropriated for this work, \$50,000 each year for three years. Another job for Mr. Lay is the development as a park of the space to the east of Grant's tomb, for which \$10,000 has been appropriated.

The city council of Indianapolis, Ind., has been requested to favor a bond issue of \$500,000 and an increase in the general park tax levy of from 5 cents to 9 cents. This is for the further acquisition of park land and some improvements which demand immediate attention.

Believing that the levee of Louisville, Ky., is in dire need of being beautified, Mrs. John A. Stratton, chairman of the River Front Committee of the Woman's Outdoor Art League, has appealed to members of the Board of Public Works and Park Commission for assistance. Mrs. Stratton's plan is to build a small park in the middle of the levee between First and Second streets.

Oakland, Cal., is planning for the acquisition of "The Heights," Joaquin Miller's beautiful home above Diamond. A committee headed by Col. John P. Irish has taken the matter up, and he was commissioned by Mayor Frank K. Mott, under authorization of the council, to interview the poet as to the terms upon which he would be willing to dispose of his land to the city. The site is ideal and has great historic value too.

Senator R. W. Tirrill, of Manchester, Ia., who recently donated the \$30,000 Riverside Park to the city, has engaged the services of a landscape gardener from Germany to beautify the park. In addition to donating the park, Senator and Mrs. Tirrill also provided a permanent improvement fund of about \$50,000. The park is located on the banks of the Maquoketa river, with excellent boating facilities.

In a communication in regard to Natchez, Miss., Mr. E. G. Routzahn, well known in civic improvement work, sends an outline under the head of "Survey of Civics," made by one of the committees of the tuberculosis exhibition, in which is shown what has been accomplished in the way of outdoor improvement to make Natchez a more desirable city in which to live, and much has been done. What is still hoped to be accomplished is: A crematory for the city's waste; more tree planting; more street sweepers; playgrounds; abolish-

ing objectionable posters, and the enforcement of ordinance against spitting.

Sanctioned by the Board of Trade, Business Men's Association and Parks and Playgrounds Association of Wheeling, W. Va., a bond issue is to be submitted to the voters to appropriate a sum to be used in making the now barren surrounding hills beautiful playgrounds and parks. Mr. Harris A. Reynolds, a Boston land-scape architect, has outlined plans.

The field force of the United States Geological Survey is searching for deposits of minerals to furnish the three necessary elements of plant food that are contained in "complete fertilizer," namely, phosphate rock, nitrite salts, and potash salts. It has already discovered and surveyed enormous deposits of phosphate rock, and 2,398,590 acres of public land containing phosphate, have been withdrawn at the recommendation of the Geological Survey, and are now waiting legislation by congress to enable their development. To insure an "all-American" fertilizer, regardless of importations from other countries, it remains to discover deposits of nitrate of soda and potash salts, and it is believed that the geologic conditions prevailing throughout a large portion of the arid West favored the accumulation, during earlier periods of the earth's history, of both of these salts and that if these still exist in concentrated deposits it is only a question of search to discover them. Hardly anything could be suggested which would be of greater assistance to the American farmer than the discovery of commercial deposits of either of these necessary fertilizing minerals.

A strong movement has developed in Billings, Mont., for a park system. Although 30 years old Billings has nothing worthy of the name.

Juarez, Mexico, is believed to be the only city in the world in which the direction and control of the city parks have been turned over completely to women. The parks in Ciudad Juarez still will be cared for by men, but above the men will be a board of eight woman managers composed of four "dames" and four "senoritas," who have exclusive control and direction of all parks.

Secretary of the Interior Fisher has suggested to the Mountain Park Committee of Denver, Colo., that instead of the proposed foothills park attention should be directed to applying to the government for a tract of land anywhere from fifteen to twenty-

five or thirty square miles in extent for a national park. He declared that the city would have little difficulty in obtaining the grant and announced his willingness to press the matter in person before congress. He further suggested that a committee be appointed from the two organizations to carry the proposition to Washington.

Seattle, Wash., is agitating the question of water front parks. The city has a long water line, and before it is too late, the water front park scheme should receive particular attention.

It is publicly stated that the city of Oakland, Cal., is, eventually, to become the owner of the beautiful Piedmont Park, which is under the control of Mr. Frank C. Havens, who has spent thousands of dollars in making it one of the most attractive of the private pleasure resorts of the city. The art gallery which is situated in the park and which has been inspired and sustained by the same gentleman will also be included in the magnificent donation to the city.

Mr. John A. Dunn, the owner of Dunn Park, Gardener, Mass., has publicly announced that the park, which is unsurpassed for natural beauty in Massachusetts, is to become the property of the town when he has it developed to the point that he desires.

Two bills were passed by the last Wisconsin legislature concerning state parks; \$50,000 was appropriated for the year ending June 30, 1911, and the same amount for the following year. This is to be expended by the park board for its expenses and for the purchase or acquisition, and improvement of state parks. Another appropriation of \$50,000 was made for the purchase of additional state parks. This sum is to be paid to the park board in five equal installments. The board is being urged to take some action in this work.

An extensive educational campaign in behalf of the proposed outer park system for St. Louis, Mo., city and county will be conducted this fall, according to John H. Gundlach, chairman of the Civic League's Committee of One Hundred. It has been definitely decided to resubmit to the voters the proposition for the creation of an outer park (public reservation) district, voted down with other meritorious measures in the excitement attending the prohibition agitation.

The Committee on Parks and Park

Sites of Richmond, Cal., has recommended to the city council that \$100,000 be appropriated from the city treasury and expended in the purchase of four parcels of land for park purposes. Two of the proposed parks are located in the west side, and two on or near MacDonald avenue, at the eastern end of town.

Here is another argument on the value of parks to a city on the "dollar bill" side: According to figures collected by City Accountant Campbell, Mount Royal Park, Montreal, Canada, valued last year by the city at \$7,511,600, has cost the city from the commencement only \$1,106,353.16 in capital outlay.

The suggestion of changing the name of Central Park, Davenport, Ia., to that of Vander Veer Park, as a memorial and tribute of respect to the late A. W. Vander Veer, has met with practically unanimous approval all over the city.

NEW PARKS

The city of Dayton, O., has leased White City, formerly an amusement park, for a term of ten years and thus has a fully equipped municipal park of 40 acres, centrally located and with nearly a mile of river front on the Stillwater and Great Miami rivers, and with unsurpassed bathing beach and boating facilities.

Part of the lawn on the Thirteenth street side of the Ridgway Branch of the Free Library of Philadelphia library building, extending from Christian to Carpenter street, has been fitted up as a breathing space, following agitation by the South Philadelphia Business Men's Association, and it will be open to women and children only.

Colonial Park, covering the twelve acres bounded by One Hundred and Forty-fifth and One Hundred and Fifty-fifth Streets, and Bradhurst and Edgecombe Avenues, New York City, has been formally opened by the Park Department.

Gov. Deneen, of Illinois, has appointed a special commission as provided by law, to have charge of the laying out and organizing of a great public park, which shall include Starved Rock, one of the historic points of Illinois.

One of the most beautiful spots in the city has been given to Des Moines, Ia., as a park and more than \$75,000 in money and property is given to the various charitable institutions in the city by the will of the late Joseph S. Lews, filed for probate a few weeks ago.



HISTORY and GROWTH of LANDSCAPE ARCHITECTURE

A Definition and a Brief Resume of Its Past and Present; Presented Before the Congress of Technology, by Stephen Child, Landscape Architect and Consulting Engineer, of Boston and Santa Barbara, Calif.

(Concluded)

IV.-Parks and Public Grounds



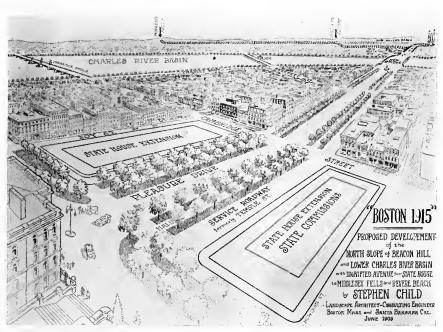
VIEW ON THE RIVERWAY, BOSTON PARK SYSTEM.

Another great class of problems are those coming under the general head of public reservations including greater and lesser parks, city squares, playgrounds and the like, the mere mention of which indicates the variety of conditions to be met. Here as in the domestic problem, however, we have again two main factors, namely: the local and the personal. In these problems, however, as we are now dealing with persons in the mass, the latter element becomes more stable and we strive to determine the wants of the average personality rather than those of the special or distinctive one. The Romans, as we earlier noted, showed us many vital principles in such designs and not the least in their study for the distribution of these areas throughout the city.

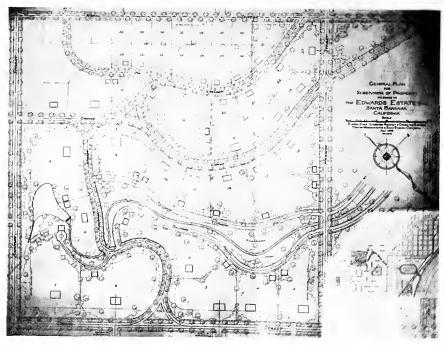
Definiteness of purpose is always to be maintained; that of a great country park for a large city being to afford perfect relief and rest to the tired

citizen by offering to him and preserving for him the contrast of broad restful rural scenery unmarred by any of the sights and sounds of city life. This involves many considerations as to the choice of the tract of land, its bounds, its present scenic effect, its accessibility, and the design of roads and paths through it so that the public may enjoy but not destroy its beauties. Notable examples of the very best of this sort of design in this country are Central Park in New York, Prospect Park in Brooklyn, and Franklin Park in Boston, all the work of the elder Olmsted and subjects of the most careful study by all his followers. Space allows mention only of such important problems coming under this general head as public gardens, city squares and playall requiring distinctive grounds, treatment.

The distribution of city parks,



A CITY PLANNING SCHEME FOR BOSTON. Stephen Child, Landscape Arch.



PLAN OF A REAL ESTATE ALLOTMENT AT SANTA BARBARA, CAL.

squares and playgrounds brings with it the problem of connecting parkways involving much careful thought as to location and details of grades and so on. Perhaps the banks of a hitherto neglected sluggish stream until now an unsightly dumping ground, can be transformed by careful design into beautiful parkways. Never has this been better done than in the case of the "Riverway," a part of Boston's parkway system leading from the city proper to Franklin Park. Beautiful and natural as this all appears now, there is hardly a line or bit of vegetation, except the older trees, that has not been placed by the hand of man where we now see it. Fifteen or twenty years ago this part of the town was one of the ugliest sights immaginable. A brackish stream struggled along through the tangled masses of sedges and swamp land. Now it has the beauty of the most restful park, but every particle of it is the result of design. This is not landscape gardening, but landscape architecture, the work of a "master artisan in matters pertaining to land."

Real estate allotments and new residential town sites offer vital and interesting fields of endeavor for the landscape architect. Here we may get much that is helpful in the way of suggestion from the present day work in these lines being done in England and Germany. But these so-called English garden cities and the German suburban townsite developments can again be copied only in the principles involved. These are

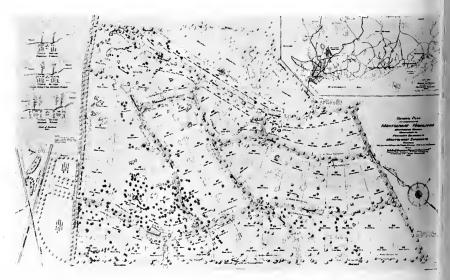
fitness, convenience, definiteness, study and skill in adapting needs to conditions, forethought to meet future demands of traffic, and so on.

All this leads up to, and in fact in many respects is part and parcel of the great subject of city planning in general, a most complicated one, and in the case of great growing cities, never ending, for it is most certainly, true that no comprehensive plan can be made at any given time which will solve for all time the problems of the great cities' growth. These are constantly changing and must be as constantly modified. Any right study of this great question, while it may solve some particularly important immediate need, as for example that of

the right placing and design of a civic center and the grouping of public buildings thereabout and may make provision for other peculiar needs, must be relatively tentative and must by constant effort and study of proposed schemes be kept up to date. Certain right principles, however, can be laid down; further extension, for example, of the vicious gridiron system of streets may be stopped. Efficient control of suburban growth may be placed in intelligent hands and not allowed to go on at the merest whim of property owners.

In many of these matters the trained landscape architect can be of greatest service in an advisory capacity. Modern city planners are realizing more and more that the first essentials are practicability, fitness and convenience, and that the beauty sought must be as a resultant of all these, not adjunct, not something to be embroidered on, but an intrinsic part of them. Mr. Olmsted has well expressed this in a recent address. "The kind of beauty most to be sought in the planning of cities is that which results from seizing instinctively with a keen and sensitive appreciation the limitless opportunities which present themselves in the course of the most rigorous practical solution of any problem." This is true landscape architecture applied to city planning, and it must not be forgotten that it must all be supported by the strong, high minded public opinion of any community in order to result in any marked degree to the city's good.

As an instance of the feeling for the necessity of something of this sort and of the growing sentiment



REAL ESTATE ALLOTMENT AT BEVERLY, MASS. Stephen Child, Landscape Arch.

that the utterly haphazard and thoughtless methods, or lack of methods, of the past, must be abandoned and something better substituted, it is to be noted that in this country alone fully seventy cities are engaged in more or less elaborate studies with this purpose in mind. In Europe great city planning efforts are going forward; staid old London is having its very vitals renovated; Berlin is in the midst of similar upheavals, and Paris, which we have been brought up to believe was nearly perfect in this respect, is getting ready to spend untold millions for further improvements of this sort.

It has not been possible within the necessary limits of such a paper as this to more than enumerate some of the salient features of this profession and the preparation necessary for the practice thereof. Inadequately and briefly as this has been done, however, the aim has been to make clear that while as its leaders contend this our beloved profession of landscape architecture is most assuredly one, if not in its comprehensiveness, the greatest of all the fine arts, its sure foundation and its never failing handmaiden is science. There has been perhaps much too strong a feeling in the past on the part of some of the present-day leaders in this profession that the influence of science in connection with this or any other fine art is of necessity more or less contaminating. Art and science have been regarded as antagonistic. But are they? Certainly the greatest painters, sculptors and composers have been absolute masters of the technique, or in other words, the science of their particular art. There was never a truly fine art developed without a complete mastery of its technique. Many of the old masters spent years of patient study in the preparation of their colors alone, and we know how successfully.

Quite as certainly is it true that this technique must never be allowed to master art. We know how thoroughly Michael Angelo, for example, in the pursuit of perfection in his art studied anatomy and how some of his later work was marred by his evident desire to show therein his complete knowledge of the most minute details of human anatomical conditions. It is by a thorough knowledge of the principles and facts, in other words the scientific data in each case, and yet by an equally complete subordination of all this to the highest aesthetic purposes or aims that perfection in this or any other art is attained.

Therefore do we study the past; therefore do we require the most careful preliminary investigations and the preparation of accurate scientifically prepared topographical plans before we can do any of our work successfully; for fitness and practicability are always to be considered first. It was because they never forgot these things and were trained to do them that the masters in our profession in both Europe and America had such success. Alphand and Andre in France, and Major L'Enfant in the early days here in his preparation of that masterpiece of landscape architecture, the plans for the City of Washington, followed by that greater master of the art, the elder Olmsted, all had scientific training of the most rigid sort and never forgot its principles or their application to the work before them.

So must we follow in their footsteps, not as copyists or imitators, but as through, conscientious students of principles.

How great shall be the benefits to mankind when in this art which so vitally affects humanity, all such problems as have been referred to and many others allied thereto, shall be attacked and solved in the right spirit; a true blending of art and science. Neither first, but both keenly and sensitively appreciated for their true worth, fór as Mr. Olmsted has well said: "The demands of beauty are in a large measure identical with efficiency and economy, and regard for beauty neither follows after regard for the practical ends to be obtained nor precedes it, but must inseparably accompany it."

(Conclusion.)

FAMILIAR PLANTS NATIVE TO JAPAN

By Ernest F. Coe, Landscape Architect, New Haven, Conn.

The country about Nikko, Japan, is rich in native plants which have found their way into our American gardens both in their native forms and in the many varieties which have evolved through the medium of the gardener.

Nikko is about 100 miles north of Tokyo at an altitude of some 2,000 feet and nestled in a most picturesque valley. The surrounding mountain peaks rise boldly, some of them to over 8,000 feet, producing a considerable range in climatic conditions both in temperature and rainfall. The character of the soil also varies greatly. These many variations encourage the great diversity of plant life one encounters in proceeding up through the valleys and on to the mountains.

While this section is usually thickly blanketed with snow during the winter months, often several feet deep and severely cold, we were fortunate in finding very little snow on the ground when we arrived February 18th. The next morning was bright and clear though crisp and cold, the ground being frozen quite deep in the exposed places.

The Cryptomeria Groves about the old temple grounds are famous for their grandeur and associated with them are old specimens of Japanese Yew, Umbrella Pine, Magnolia, Hemlock, Fir, Rhododendron, Azalea, etc., many, no doubt, having been there since the 17th century, when the illustrious Shogun Ieyasu's Mausoleum was started. An old Umbrella Pine or Koya-maki of the Japanese, somewhat decrepit with age stands at the left of the gate leading to Ieyasu's Mausoleum. This is said to be the identical tree that he personally carried there from its mountain habitat when so small that it could be put into his palanquin.

As one emerges from these sacred old groves surrounding the temples on the way to Lake Chuziuji, he finds himself in a deep gorge, a clear rushing torrent at his feet and high mountains on both sides. Picturesque Japanese homes and stores of many styles and classes appear at intervals. On the road which is a highway to and from upper mountain districts one frequently meets the passing primitive packs of the mountain people; some on horses, some on bullocks and many on seemingly overburdened men and women whose wearing apparel is often so scanty that the wonder is that they do not freeze to death. The ascent for the first half follows the river. In the sheltered ravines Cryptomeria, several sorts of Pines, Cypress, Hemlock



NANTAI-SAN, CHUZENJI, NIKKO.

are frequently met and enrich the landscape greatly. The Japan Witch-Hazel follows the river and in sheltered places was in bloom, its delicate, deep yellow flowers standing out in most agreeable relief; a harbinger of spring or rather the sign of autumn, the peculiar trait of our own native Witch-Hazel. In the thickets one meets familiar shrubs in the Forsythia, Deutzia, Diervilla, Kerria, Euonymus, Eleagnus, Stephanandra, Spiræa, Syringa, etc.; also species of Alder, Willow, Hornbeam, Paulownia and Larch, Magnolia, Wistaria, Bittersweet, Akebia, Actinidia, Berchemia, Clematis and Grape clamber about the rocks and up into the thickets and trees, with wild abandon.

After crossing the third bridge the real ascent of the trip begins. The country is now so rugged and rocky that even the thrifty Japanese farmer does not attempt to farm it and the tree growth is so scattered and scant that lumbering finds little encouragement. To the plant lover it is a rich and varied field. The flora disposes itself most picturesquely and charming views present themselves everywhere as one ascends higher and higher. We soon reached an altitude favorable to heavy timber growth. Where sufficient soil prevails, thick woodlands of Beech, Maple and Oak appear with an undergrowth of Azaleas of several species which must be very gorgeous in their season of bloom. Hydrangea

(paniculata). Barberry and most of the shrubs noted above appear at favorable intervals. The climbing Hydrangea ascends to the tops of many large trees and Euonymus (radicans) not only forms heavy trunks as it clings to the forest trees, but in many places runs about as an undergrowth.

When within half a mile of the lake we reached the pass and were soon on the shady side of the mountains. All was here icebound and very slippery underfoot and the air very cold. White Birch, Larch, Oak, Beech, Hemlock and Spruce here grow to large size. Barberry, Ligustrum, Elder, Prinos, Euonymus are here conspicuous among the shrubs. The angry waters of the lake whipped



ON THE SHORE OF LAKE CHUZENJI, NIKKO.

into fury by the gale from the north but clear and brilliant in the afternoon sunlight, shown through the trees and soon we were at our destination. This charming spot is a favorite resort in the summer, both with the Japanese and the foreign tourist, but at this season of the year few find their way here. Our recourse for the night was a Japanese inn.

The next morning as we descended the mountain we wondered why we had feared that night for we had really been quite comfortable. The houses are built so light and frail, the fire pots seem so meager for warmth, the bed on the floor and the bedding so uncomfortable, the food strictly ala-Japanese, the bath tub—the one surely warm feature—; those all seemed too insufficient for comfort as the cold wind whistled through the trees and the waves slapped up on the rocks along the shore, but we decided to brave it out. The wind went down with the sun, the double shutter system of the Japanese house kept some of the heat in and much of the cold out, and after a bath in the boiling pot, known as the Japanese bath-tub, we found ourselves quite comfortably waiting for dinner as we squatted on our cushions on the matted floor leaning over the fire box of hot charcoal. The miscellany brought in so daintily in a number of covered trays by the pretty serving maids proved a dinner quite acceptable after so strenuous a climb. What we could not pick up with the chop-sticks we were supposed to drink from the various dishes, interspersed throughout with hot rice. With copious draughts of hot Japanese tea we made out a most satisfying meal. We were soon ready for the bed which had been made up on the floor. After donning the Japanese sleeping kimonas and slipping under the mattress-like quilt or futon we were reasonably comfortable, warm and soon asleep. Our breakfast was practically a repetition of the evening meal but good appetites gave flavor to everything and as we started down the mountain we were sure we would have missed an interesting experience had we not stayed the night at the Japanese inn at Lake Chuziuji.



LOOKING DOWN THE VALLEY, NIKKO TO CHUZENJI.

ASKED ANSWERED and

An exchange of experience on practical matters by our readers. You are invited to contribute questions and answers to this department.

What shrubs flowering in July or August are suitable for growing in dry, sandy, sunny situations?—H. C.,

There are no shrubs which bloom in July and August except altheas and hibiscus. I doubt if altheas will be hardy at Greeley. The hibiscus is all right; it kills to the ground like the peony and then comes up and blooms next summer about August or September. It grows 3 to 4 feet tall and is covered with large belllike flowers of great beauty. There are several colors among them mostly white and pink. Better plant in the spring.

York, Neb. C. S. HARRISON.

What kind of tools are most practical for removing bodies under all conditions?

The difficulty of removing a body from a grave is mostly in first getting straps under the casket. This is accomplished by using the long hooks shown in the accompanying photograph, lifting the casket at one end and sliding straps under. To remove the outer box a pair of tongues, somewhat hooked at the ends, shown in the photograph, are fastened to the end of the box and with straps through the handle the box is lifted out. The photograph shows tools now in use at Forest Hills Cemetery, Kansas City, Missouri.

Kansas City. SID J. HARE.

How may citizens of the smaller towns be educated to appreciate and assist in promoting civic beauty? -J. G., Kas.

[Answers are invited from our readers.]

H. C. P., Vt. We wish to know: (1) What to do where grass is winter-killed on lots in cemetery. (2) How to eradicate plantain and dandelion from lawn.

(1) Where the grass has died out in spots on cemetery lots and it is considered inadvisable to go to the expense of spading up and resodding or re-seeding, by going over the place with an iron rake, sowing a grassseed mixture suitable for the particular locality and thoroughly rolling, good results are often reached. If a large space on a lawn is killed, the chain harrow may be used instead of the iron rake.

(2) We have little trouble with plantain, but dandelions are only too abundant. Repeated experiments with chemicals have failed to give satisfactory results, even when applied to the individual plant. An interesting experiment of this character is reported in Bulletin 131, issued by the Bureau of Chemistry, U. S. Dept. of Agriculture.

A good fertilizer may so stimulate the growth of the grass that the weeds will be crowded out. In the older cemeteries, neglected lots are a prolific breeding ground for weeds, and care should be taken to mow them



TOOLS USED IN DISINTERRING BODIES.

before they go to seed; with biennial and perennial weeds this should be supplemented by digging up the individual root.

Cambridge, Mass.

J. C. Scorgie,

Supt. Mt. Auburn Cemetery.

"I should like to know something about the cost of planting and maintaining small leaved ivy on graves, and when planted on perpetual care lots, whether the ivy is cared for without charge."-Maryland.

We plant a great many graves with English Ivy and charge \$5.00 for planting them; our present charge is \$1.00 per year care. This is not sufficient and we are thinking of raising the price next year to \$6.00 and \$2.00 for care. I would very much like to

cut the planting of Ivy out but it is a custom here that it would be almost impossible to do away with. I would suggest that your correspondent charge \$6.00 and \$2 a year for care. GEO. M. PAINTER.

Westminster Cem.,

Phila.

Both Ivy and myrtle (Periwinkel) are largely used at Woodlawn for mound coverings. The first cost of planting graves is \$6-and the care and maintaince of same is \$5.00 per year, which includes covering with spruce boughs for winter protection; this charge is made in any event either direct to the lot owner or to the special care fund. Graves of this planting require constant care, hence the charge; without care, Ivy or myrtle will soon be choked out by grass or weeds and become unsightly and untidy. This planting is optional, otherwise sod is used.

FRED R. DIERING.

Woodlawn Cem. New York City.

The cost of planting "English Ivv" upon a grave here varies from \$4.00 to \$5.00, and in our perpetual care lots Ivy is maintained without extra charge where such agreements were made, and the facts considered in arriving at our estimate of the amount required for that purpose.

W. C. Grassau.

Green-Wood Cem.

Brooklyn, N. Y.

My opinion of what your correspondent means by "small leaf ivy" is, myrtle that we use here in the East to plant graves with. We do not use it instead of sod, only there are a number of lot owners that desire something planted on the graves and the myrtle seems the most satisfactory plant to use. Our price is \$12.00 to prepare and plant a grave and this includes the care for one season, after that the charge is \$3.00 per year for care whether on a perpetual care lot or not. Our lots are sold with perpetual care of grass only and if any lot owner wants myrtle, flowers, or anything else they have to pay extra for the same.

J. F. HARGRAVES.

Forest Hills Cem.

Jamaica Plain, Mass.

We plant considerable ivy on the graves in this cemetery and make a charge of \$5.00 for such planting when the lot is under what we term our special or extra care system which, of course, is an extra charge for extra care of the particular lot. In cases where the lots are not under

Continued on page XV.



THE A. A. C. S. CONVENTION AT PHILADELPHIA

The twenty-fifth annual convention of the Association of American Cemetery Superintendents, held at Philadelphia, Pa., September 12-15, 1911, brought together the largest body of cemetery superintendents and other cemetery officials and their wives that has ever convened. It is unusual to hold a fourdays' convention of this association, but in view of the fact that the executive committee comprised representatives of the cemeteries of Wilmington, Del., and Trenton, N. J., as well as Philadelphia, each of whom were desirous of entertaining the association, all of the time was occupied and much more might have been profitably spent, where there is so much of interest, historic and otherwise as abounds in this, the "nation's birthplace," and its environment. Headquarters were at the Continental Hotel. The "Lexow" investigation, now pending, manifestly disarranged the equilibrium of the mayor's office to such an extent that His Honor entirely overlooked the important function he was to perform in passing over the traditional keys of the city. He knew, however, that he could safely "let George do it," and George and his able assistants on the executive committee certainly did everything possible to give their guests a good time.

President W. C. Grassau, superintendent at Greenwood Cemetery. Brooklyn, N. Y., and Secretary-Treasurer Bellett Lawson, Jr., Elmwood Cemetery, Chicago, filled their respective posts.

At least 175 persons were present when the meeting was called to order. The convention was opened with prayer by Rev. Dr. Adamson, of Philadelphia. President Grassau departed from the usual custom of preparing a formal address. He expressed his appreciation of the honor of presiding on the occasion of the association's silver anniversary. All of the practical cemetery questions had, he said, been discussed in the address of his predecessors in office. Quoting Ex-president John Reid at Chattanooga last year, he said the business superintendent regarded these annual conventions as an opportunity for education rather than "a chance for an amusement outing." He, therefore, deemed it expedient to proceed with the business of the convention. Secretary-Treasurer Lawson's annual report showed a membership of 220 and a substantial balance in the treasury. Two of the oldest members were removed by death during the past year: Timothy McCarthy, Providence, R. I., and L. L. Mason, Jamestown, N. Y. During the illness of Mr. McCarthy and at the funerals of both these members, flowers were sent by the association. The secretary suggested that action be taken at this meeting on the recommendation of former Secretary Eurich regarding associate members. He also suggested having the executive committee separate from the convention committee, the former to perform the duties suggested by its title and the latter to have charge only of the conventions. He recommended abolishing the advisory committee

The committee appointed by the chair to whom this report was referred reported adversely on the recommenda-

In pursuance of the resolution adopted at Chattanooga last year relative to presenting former Secretary Eurich with a testimonial of the association's appreciation of his long and faithful services, the presentation came as an unexpected number on the programme. Edward G. Carter used the proverbial "words fitly spoken" in presenting the beautiful tribute, in the form of an open face gold watch. The handsome time piece, known technically as a No. 14, has an 18 karat case, Addison movement, with 23 jewels. The outside case bears the letters F. E. in ribbon monogram. Inscribed on the inner case are the words: "Frank Eurich, from fellow members of the Association American Cemetery Superintendents, September, 1911." In accepting the beautiful tribute Mr. Eurich was deeply touched; he said, "I am completely overwhelmed and can only thank you from the bottom of my heart."

At the afternoon session Bellett Lawson, Jr., read a paper on the subject of "Community Mausoleums," which follows:

COMMUNITY MAUSOLEUMS. By Bellett Lawson, Jr. On March 24, 1907, Mr. William 1. Hood

applied to the United States Government

for a patent for what he claimed to be a "New and Useful Burial-Crypt."

The specifications or description states "that the building comprises a hall or lobby sufficient to accommodate a train. The catacombs are arranged in vertical rows tier upon tier, and separated from each other by homogeneous partitions; preferably of concrete cement."

In fact the whole description covers the

modern sanitarj tomb such as is to mortuary architects for the past twenty-five years or more.

The patent, however, was granted on June

25 of the same year.

That there is nothing new in the invention is evident to any one versed in mortuary architecture.

must presume that the patent was granted because of the fact that the patentec swears that the invention is new, and the patent office searcher finds nothing to the contrary. Since the issuing of this patent there have been several other minor patents issued, but the one referred to here is the basis on which most of the so-called community mausoleums are being fostered on the public today.
Some of them have merit; most of them

have none.

I have said there is nothing new in this invention. This could be proven by going back many generations, but I will leave that out and go back only 49 years. The City of Liverpool, England, built a community mausoleum in 1862 in the Liverpool Cemetery. This is a large structure, and is divided into compartments or arches as they are called. In each arch is a group of twenty catacombs. The authorities will sell any number of these catacombs that may be desired. With each catacomb purchased the right is given to erect a morial tablet in the chapel portion of the building. The cost of these catacombs seems very reasonable, being but six pounds or about \$30 in American money.

In this country there have been many cemeteries that have built Tombs for temporary use practically as described in the patent. A few cemeteries have sold catacombs in the Tombs.

I personally have built two tombs with catacombs as described. One in Harrisburg, Pa., in 1899, and the other in Ba-tavia, N. Y., in 1905.

The fact that the catacombs in these

buildings are rented instead of being sold should not give any other person or company the exclusive right to build and sell catacombs.

The Elmwood Cemetery of Detroit, Mich., has built a community mausoleum; the building has been built for a number of years, and has not been as successful fi-nancially as the Cemetery hoped it would It goes to prove, however, that these buildings were in existence before the patent was applied for.

Before going into the subject further it may not be out of place to give a brief history of the community mausoleum growth.

The patentee and one John W. Chesrown formed a partnership under the name of W. I. Hood & Co. Later this was dissolved and the National Mausoleum Co, was organized, which still later was changed in some manner to the International Mausoleum Co. The first company

had its headquarters at Shelby, Ohio. The present Home Office of the International Mausoleum Co. is at Chicago, Ill.

These companies have sold State and County rights where possible, and it is from these rights that the smaller or local companies are organized.

It is the selling of these territorial rights that has caused such poor and grotesque buildings. Each owner of these rights is a "greenhorn" at mortuary work. If he employs a local architect it will most likely

is so built expected to last forever. The agent who is selling catacombs will say, "We have a permanent fund to take care of these things as they decay." Here is where the \$2,500 mentioned before comes in. This in one case was also to be used to create a fund for janitor service, open and close catacombs and give perpetual care. Let us see how it will work out; \$2,500, carefully invested, will bring in about \$100 a year.

Now let us in justice to the mausoleum

been approached by some representative of the mausoleum company. In every case they had been either refused permission to build in the cemetery or the mausoleum company wanted to creet too cheap a building, and were not willing to allow a reasonable amount for perpetual carc.

I will digress here to say that an agent of the mausoleum company even went further with the cemetery that I have the honor to represent, and asked us to partially finance the deal for them.



PARK EFFECTS IN THE LANDSCAPE OF WESTMINSTER CEMETERY, PHILADELPHIA.

be the first work of this kind he has done. Few architects know much about mortuary work, as it is or should be a calling separate from other architecture.

The owner also wants to keep the cost down, first in order to make a good profit, and second to sell these catacombs to the public in competition to the other forms of disposing of the dead. The mausoleum companies always claim their method is the cheapest.

That it looked like a get-rich-quick:

That it looked like a get-rich-quick money-making scheme there is no doubt. It has not always proved as profitable as it seemed on paper.

The methods generally are as follows: a plan for a building is made to hold, say 500 catacombs, these are represented to be worth in most cases \$150 each. Agents are sent out to get subscriptions at this price, and each subscriber is asked to sign a subscription note of \$150.00 for each catacomb purchased. These subscription notes usually call for one-third of the amount when the foundations are in, one-third when the building is up to the roof and the balance on completion.

A building to hold 500 catacombs usually costs about \$40,000. The subscription price is \$75,000. The difference, except \$2,500, which I will discuss later, is the promoter's profit—if everything turns out as expected.

You will notice that if everything goes as planned that very little capital is required to build these buildings. In fact, the subscribers pay as the work proceeds. These buildings are far from being permanently built. To be sure, they are built mostly of concrete. This portion is all right, but they have in many cases wrought iron gates, iron doors, iron beams and skylight frames. Think of a building that

company presume that the agent was talking beyond his authority, and that the money was to be used for perpetual care How far would this \$100 go? At our New York convention one of the greatmausoleum builders in the made the statement that no private or family mausoleum should have an endowment of less than \$10,000 or \$400 a year, and here is a company who are saying that \$100 a year is ample to take care of a building, which on account of its size cannot be as well built and is fifty times larger. This is where the public is taken in because they do not understand these things. That the scheme appeals to the public there is no doubt, especially to the female mind, and many of our superintendents are in favor of this mode of disposing of the dead.

I do not hesitate to say that these catacombs are being sold by misleading statements, and it does not stop at what I have said about perpetual care; as for instance, at our last convention Mr. L. L. H. Austin, an officer of the mausoleum company, was given ten minutes to address the convention, and on account of this address they lead people to believe that we endorse their proposition, and say that we "manifested marked interest when Mr. Austin addressed the convention." We were, no doubt, interested, but not in the way they would have the public believe.

In the fall of 1910 a cemetery association not organized for profit sent a committee of two to thoroughly look into the community mausoleum proposition. The first city they visited was Chicago.

city they visited was Chicago.

They called on officials of most of the leading cemeteries, and each one of these officials expressed the opinion that they had

The next visit of the committee was to Kankakee, Ill. There they found a mau-soleum of 560 catacombs. They gave it their opinion that the architecture was poor and undesirable, and that no pro-vision had been made for perpetual care. I will again digress to say that I have looked into the Kankakee project myself the mausoleum company this building in one of their advertisements as "one of the finest mausoleums of over 500 crypts ever built in the United States." The committee, however, were misinformed as to "no provision for perpetual care," for a fund has been created amounting to \$2,700. The interest of this fund has to keep the grass on the lot cut as well as keep the building in repair. In justice to the builders of this building I will state that they have put more money into it than is usual. The building is made of cement blocks with marble and glezed brick interior. There is, however, much to be criticised from a sanitary standpoint. For instance, the odor from one catacomb can pass to another behind the marble The much-boasted valves to let out slabs. the foul gases were in some instances entirely out of order, and I believe in due time will all get corroded. The formaldehyde deodorizing tanks were empty, and from inquiry found that this is the rule, and to have them filled was the exception. These tanks, by the way, were in wooden boxes.

The committee next visited Springfield, Ill. At that time there was in the course of construction what Mr. Hood, the patentee and president of the company, claimed to be the finest of all the community mausoleums. This committee found that the exterior of this permanent

building was of Bedford stone of a very poor grade, and much discolored before the building was completed. The other parts of the building were not far enough advanced to form much of an opinion.

Their next visit was to Aurora, Ill. Spring Lake Cemetery they were informed that the mausoleum company had been re-fused permission to build. Failing in that cemetery they purchased in Montgomery Cemetery, which is a small country burying ground, and built a mausoleum which, to use the committee's own words, is "very poorly constructed and the design is very crude." The exterior is of cement blocks so poor that they had to be treated with some kind of an exterior wash or coating.
The next community mausoleum visited
was at Toledo, Ohio. This is described as being of a very grotesque appearance and not fit for any cemetery. It is located on land of their own outside of any cemetery boundary.

In the Brooklyn Heights Cemetery, at Cleveland, Ohio, was found what seemed to be the best deal, from the cemetery man's standpoint, that the mausoleum company had made. The committee make no comment on the building, but state that the mausoleum company paid 60 cents a foot for the land, \$12.50 per catacomb for permanent care, and 30 catacombs for the use of the cemetery for a receiving vault. They visited many other cities, and found cemetery men in general opposed to these public mausoleums.

There are several good cemeteries that have allowed these buildings erected. What will be their position as regards these buildings fifty years from now? We will presume, like the Cleveland cemetery, that they got their price for the land, and that this includes reasonable care such as cutting the grass, etc. It is not far-fetched to presume that the time will come when the annual outlay for replacements will be considerable. As the cemetery has no financial interest in the building, will they let it go to ruin or will they repair it? If they repair it, who will pay the bills? There will be few, if any, catacomb owners left. It must be understood these are the real owners of the building, but, being dead, they cannot pay any bills. It then resolves itself into the fact that the cemetery must do repairs for little or nothing or allow the building to become unsightly, and greatly depreciate the value of the other property of the cemetery.

Mr. Hood is the authority for the statement that the mausoleum company had purchased ground not in any cemetery but adjacent to Chicago for these mausoleums. If this is true, I again ask the question, what will be the result in fifty years from now? I will presume that as Chicago is a large city the mausoleum company could construct buildings to hold 1,000 catacombs each. I will also presume that in the future the mausoleum company will be very much more liberal as to funds for perpetual care, and will set aside as much as catacomb. This will make a fund \$25 per of \$25,000, which at 4 per cent will bring in \$1,000 a year. Now it must be borne in mind that these buildings will not be in a cemetery, and there will be no ceme-tery association to give janitor service, keep the grounds in order, open and close catacombs, and do the many small necessary things that will have to be done. It will take all of this \$1,000 for this service. Where is money to come from for repairs, etc.? I will leave that for others to answer, as I cannot.

As I prepared this paper I had before me a copy of the Illinois State Register of page write-up. They show the tombs of Menelukes. Rachel, Absalom, Lazarus, Jo-seph and David. In this write-up the permanence of tomb burial is dwelt upon. The pictures are striking examples of the falsity of their statements. Each is a mass of ruins, and historic associations connected with these is all that has preserved what is left of them.

If I should undertake to answer all the assertions in this paper I could take up the entire time of this convention.

Before I finish, however, I would like to answer a statement made at our last meeting by Mr. Austin. He said one member (meaning myself) stated cement fence posts would last forever; why not cement mau-soleums? Cement concrete is all right when well made, but they have not always done this well. The worst fact is that many of these cement buildings have iron doors and iron frames for the roof; in some cases iron roller curtains are used in place of doors, and in one of their published specifications "Sacket's plaster board is specified on 2x4 pieces between I-beams." At least one of their best buildings is veneered with glazed brick, which is far from being fit for a mortuary building supposed to last forever.

The object of this paper is not to attack the International or any other mausoleum company, but give cemetery officials something to think of as to permanence. It thing to may not be out of place here to say that the whole mausoleum subject, both private and community, is one that should have the most serious consideration of cemetery officials. There has not been enough earomicials. There has not been enough ear-nest thought, and consequently very little action along that line. I have said some-thing about endowments or lack of endow-ments. It is not half of what could be said, but the whole subject can be summed up in one sentence, viz., mausoleums of any kind should be well and amply endowed.

From the foregoing some of my hearers will say that I am opposed to mausoleums. Personally I do not like them. To my mind there is nothing so secure as earth burial (unless it be cremation). Even earthquakes seldom disturb the buried dead, e though the monument is thrown down.

On the other hand, I am in favor of community mausoleums if the public mands them, but they should be built as nearly perfect as possible, well endowed, and built by the cemetery authorities without any connection whatever with any outside company.

Limited time precluded a discussion of this paper, as it did also of the excellent paper on "Re-arranging an Old Cemetery," by F. H. Rutherford, Hamilton, Ont. He said in part:

REORGANIZING AN OLD CEMETERY. By F. H. Rutherford.

In the case of a municipally owned cemetery, probably the first step taken should have the management of the grounds transferred to an independent board, composed of citizens who have plenty of leisure time, and whose term of office would be long enough to insure a continuity of plans.

Then follows the framing of rules, and the board and superintendent that expect to enforce absolutely a perfect set of rules in a year or ten years are going to endure some moments of bitter disappointment, for if it were possible to frame this ideal code it would be absolutely impossible to enforce

it entirely in so short a time.
Citizens who have come to consider that cemetery consists principally of high mounds, fences, vines and surplus bric-abrac and glassware from the home are not so easily persuaded that it is time for a change, more especially if these have arrived at advanced years of intelli-

Make your rules as nearly perfect as is possible. Shape your plans all in the one direction, and then, assuming that all lot owners are Missourians, proceed to show them what might be done.

Some slight benefit will undoubtedly be derived from the perusal of the literature of other cemeteries, but it would seem to us that it is absolutely necessary that these cemeteries should be visited, not necessarily the magnificent ones, studded with mauso-leums, memorial chapels and the like, although these are educative, but the more modest burial grounds not overburdened by great wealth, but whose superintendents superintendents have fought and are fighting successfully similar difficulties, and are ready to share that knowledge, gained perhaps by bitter experience.

When ready to commence work the lot owners should be taken into the superintendent's confidence and, until proven guilty of animosity to the new rule of things, should be adjudged as friends.

Tell them your plans and the reasons, and then proceed as far as may safely be attempted to make them do as you advise. As time passes the chronic kickers will ediscovered, and to these, while acting fairly, no special consideration should be shown; for if the superintendent is on the right track, public opinion will uphold him.

The new sections, as opened, should conform strictly to the best usages, and so should be an example to owners in other sections of what might be accomplished. But the work should not rest there, for the campaign should be carried, as soon as possible, into the older portions; and while the degree of power possessed by the board will necessarily govern to some extent the amount of work to be attempted, yet can be safely asserted from experience that if, when complete plans have been made for the regrading and improving of a section, the lot owners are notified fully of the intended changes, with the reasons for these, the objecting owner will be in such a small minority that the superintendent may safely ignore his objections.

This work of improvement should be undertaken systematically, a certain portion to be completed each season, and it should be commenced most cautiously, especially for the first two or three years when the system is on trial, every effort being made to show all possible respect for the feelings of those accustomed by years of experience to the old order of things, resting assured that each year's work will be easier than the last.

The money for this work of improvement must be derived from some source, and in the absence of any fund for the purpose this money might be derived from the sale of new ground without resulting in any great hardship to the purchasers, especially in a municipally owned cemetery where profits are not required, it being still possible to provide a fund sufficient for the care without making the cost of the ground exorbi-Certainly the provision for a time of this extra money is necessary, from what-ever source, and certainly also the likelihood of there being any funds accumulated under the old management is very remote.

It is hardly necessary to say that the commencement of a perpetual care fund should be undertaken at the outset, and while probably the corresponding increase in price of ground will come as a shock to the unthinking, and while it is possible that provision will still have to be made in the municipal cemetery for the poorer citizen, yet it should be possible to so educate the people that in a few years a sum would be derived from the sale of every lot to provide for its care (after setting aside the necessary sinking funds).

An educative campaign in reference to the perpetual care of the older cemetery should also be started, and in order to emphasize the advantages derived from this care the annual charges should be made reasonably

Practically every letter or statement leaving the office should contain an enclosure dealing with the advantages of this perpet-ual care system, and it will be found that soon the citizens, adopting these arguments them what might be done.

If the superintendent is fortunate enough to be possessed of full knowledge of his work so much the easier, but even if inexperienced the task is far from hopeless, ent's best missionaries to the benighted. As soon as possible every department of the work in the cemetery should be assumed control of completely by the board, no person being allowed to disturb the turf on any lot without special permission, and when a definite rule has been established as to the location of flowering plants, we believe it advisable and economical to provide for the use of lot owners, free of charge, the services of gardeners who will undertake entirely the placing of these plants, thereby eliminating the possibility of individuals displaying their several and varied artistic ideas.

Considering the nature of the soil and the contour of the land, the best style of roadway should be decided upon, and a systematic scheme of roadmaking undertaken with the object of arriving some day at complete uniformity in this department of the work.

As a valuable assistance in the work of Improvement, an example should be presented yearly by the judicious planting of public portions of the cemetery of what ordinary good taste would produce, and the superintendent, no matter how inexperienced, will find in this department one of the most interesting studies, as well as one of the greatest pleasures, in connection with his work.

And now, when all plans are laid, the one great effort should be to give to, these owners, who are supporting the efforts of the managers, full, and more than full, value for their investments.

Good workmen are necessary and (at the risk of contradiction) the division of the cemetery into sections and the placing of groups of these men, with some recognized head in each section, seems to be the most reasonable method.

In this way a visitor would always be able to find an employe near by to whom his or her troubles may be told, so that even without telephone connection these troubles may be forwarded promptly to the office, thus enabling the superintendent to supply a remedy when the section foreman is unable to do so.

Again, by this plan, it is possible for the foreman, under the guidance of the superintendent, to gain an intimate knowledge of each lot, eventually learning the peculiar conditions attached to each, and (especially in the case of the class of cemetery under consideration) knowing just the kind of care to which each lot is entitled, for we believe that there should be a marked distinction made between the care given to the special care lots and that given to the ordinary or rough care portions, and as an aid to this, marked maps should be placed in each section, which would result in a more intelligent interest being taken in the work of the assistants.

The foregoing ideas, the result of many educative disappointments, touch in not the most complete nor clearest way upon some of the questions involved in undertaking the reclaiming of a neglected burial ground, the adding to a city of another creditable institution and the relieving of the lot owner of much of the sorrow, so necessarily connected with a cemetery, however beautiful.

The remainder of the afternoon was devoted to visiting Fernwood Cemetery, in Delaware county, Pa., whither the party went by the Pennsylvania R. R. The cemetery was established in 1871 and is now under the care of John G. Kline. Certain sections are reserved for lawn plan, in others coping and various styles of lot inclosures are permitted. Opportunity was afforded here to inspect a "community mauso-leum," erected by the Pennsylvania the Pennsylvania Mausoleum Co. on land bought from the cemetery company. The building is of concrete construction, with an ornate entrance of Indiana limestone. The interior is finished in Vermont white marble. There are approximately six hundred crypts, a few of which bore inscription tablets. Representatives of several mausoleum companies were present to defend their respective claims. An animated discussion is said to have taken place between them and one or more of the cemetery superintendents.

In the evening the unique undertaking establishment of Oliver H. Bair, 1820 Chestnut St., was visited. four-story steel and concrete building it without doubt the most thoroughly equipped funeral establishment in the world, yet there is nothing to suggest this in the handsomely furnished foyer, offices, parlors and private apartments on the first and second floors, with their Oriental rugs, statuary, paintings, and antique furniture. In the show room on the third floor fully two hundred caskets are on exhibition, no two alike, suited to the means of all classes. The mortuary is on the fourth floor, where bodies are kept as safely as in a cemetery receiving vault awaiting final interment. After an inspection of the building the visitors were pleasantly entertained with an organ recital.

The second day was devoted principally to sight-seeing. Shortly after 9 a.m., a procession of forty-seven touring cars and taxicabs left the Continental Hotel and before their return in the evening at least seventy-five miles had been covered. The route included Fairmount Park, the beautiful Wissahickon creek road, Laurel Hill, Mt. Peace, Northwood and Ardsley Burial Park.

It is interesting to note in passing that Philadelphia has more cemeteries and burial places of one description or another than any city in the Union, if not the globe, the exact number said to be 366. Probably the greater part of the interments are now made in less than twelve of that number. Laurel Hill, situated on the eastern bank of the Schuylkill, and containing nearly one hundred acres, was the second rural cemetery in the United States. It was founded in 1835, a few years after Mount Auburn, Boston. The cemetery is divided into three parts, known as North, South and Central Laurel Hill. One of the interesting pieces of sculpture seen here is a group representing Walter Scott's famous character Old Mortality at his favorite occupation-cleaning tombstones.

The Thomas Meehan & Sons Co. nurseries at Dreshertown, Montgomery county, were reached after a delightful ride through a picturesque country. At this point the ride had covered forty miles and the party were quite in readiness for the buffet luncheon, served by a Philadelphia caterer in the Meehans' big packing shed, which had been decorated for the occasion. Mr. Thomas B. Meehan and his son Bert assisted the executive committee in caring for the visitors. Time was too limited to permit of anything more than a hasty inspection of the nurseries and this was also true when the autos reached the Andorra Nurseries at Chestnut Hills. Sufficient was seen, however, to create a favorable impression on the minds of the visitors, many of whom are recognized experts. Light refreshments were served here amidst sylvan surroundings that would be difficult to equal. The magnificent trees seen here and elsewhere along this enjoyable drive must have inspired Mr. Falconer to make some mental notes that he will doubtly share with PARK AND CEMETERY readers in the near future. Mr. William Warner Harper and Mr. Humphries did the honors at Andorra. West Laurel Hill, Philadelphia's justly famous cemetery, dedicated in 1869, was reached late in the afternoon. A short stop was made at the Tower, to visit the temporary officials and new receiving tomb. Work is in progress on the foundation for the new and modern office building that is to stand on the site of the one recently destroyed by fire. This cemetery long since adopted the community mausoleum idea, building and controlling its own structures.

A large number of costly mausoleums are to be seen here, and many fine trees in great variety. Charles B. Jefferson, secretary and treasurer of the Executive Committee for the Philadelphia convention, is the superintendent. The last cemetery to be visited was Westminster, where the same picturesque landscape prevails that abounds in the beautiful Schuylkill Valley. This is a comparatively new cemetery of 110 acres and its development is proceeding along modern lines of cemetery practice. Its broad undulating lawns with their unbroken stretches of greensward were admired by the visitors during their brief visit. George M. Painter, chairman of the executive committee of the Philadelphia convention, and one of the best known cemetery men in the state, is superintendent of Westminster.

At the evening session the Question Box brought out some unfavorable comments on white bronze monuments. They are prohibited in Greenwood, Brooklyn, N. Y.; Oakland, St. Paul, Minn., and Newton Cemetery, Newton, Mass.

Thomas Wallis, superintendent Rosehill cemetery, Chicago, Ill., read a paper on "Cemetery Records," in which he gave a description of the various card indexes, books, plat records, etc., in use at his cemetery. No matter what system is used, he said, too much care cannot be taken to insure accuracy.

Robert R. Bringhurst, a popular local undertaker and former city treasurer of Philadelphia, addressed the meeting informally. He extended cordial greetings to the visitors, commented on local politics, said he noted a marked improvement in the condition of the cemeteries around Philadelphia, and incidentally wove in some good stories.

New members admitted during the meeting were: Harry S. Adams, Supt. Forest Hills, Jamaica Plain, Mass.; David Casselburg, Supt. Odd Fellows, Philadelphia, Pa.; F. D. Clark, Supt. Prospect, Toronto, Ont.; Bradley Cummings, Supt. Linden, Linden, N. J.; J. Thomas Carter, Supt. Burial Ridge Cem., Baltimore, Md.; C. J. Gallon, Supt. Beth Israel, Hartford, Conn.; C. T. T. Mason, chairman executive committee, Boone, Ia.; Miss Daisy M. Blaine, Asst. Supt., Elmwood, Detroit, Mich.; Lewis D. Wilson, Secy-Treas. Arlington Cemetery, Camden, N. J.; Charles T. G. Flaherty, Supt. St. Agnes, Albany, N. Y .; Jacob Schwab, Supt. Waldheim, Chicago, Ill.; Benj. Kuykendall, president Towanda, Pa.; C. W. Dwyer, supt. Mt. Olivet, Dubuque, Ia.; Edw. A. Merriam, Loudon Park, Baltimore, Md.; J. M. Stratton, Supt. Mt. Peace, Philadelphia, Pa.; Henry Tieman, Supt. New Oxford, Pa.; Peter Olsen, Asst. Supt. Oakland, Warren, Pa.; Clarence Thornton, Supt. Bethel, Elktion, Md.; F. J. Merrick, Supt. Newark M. E., Newark, Del.

Third day, morning session: Edward G. Carter, Supt. Oak Woods Cemetery, Chicago, who has been experimenting with motor trucks in that cemetery for some time past, gave the results in a carefully prepared paper which follows:

MOTOR TRUCKS IN THE CEMETERY. By Edward G. Carter.

A study of the possible use of motor trucks for cemetery purposes based on an experience of four months' operation during the cpen season, together with the necessary experiments leading up to their adoption, suggests the following, confining ourselves to the draught problem, without reference to passenger traffic.

Draught service in the cemetery may be

divided into two general classes of Fieldwork and Road-work and the former may be eliminated from present consideration, except as it may necessitate the retention of horses that might also be used in contingencies. Road-work covered by this inquiry includes that by dump-carts, various wagons and sleds. These last are probably aside from competition by the motors and may be placed with the Field equipment.

The expectation then in the use of mo-

tors is to do the work in the grounds heretofcre done by the carts and wagons and if economy is demonstrated in this, it probably involves the largest and most expensive department of vehicle service. It consists of light and heavy classes, the former to include such as may come under burdens of 1500 pounds, which is the rated capacity of the general run of delivery cars and the heavy to include the general cemeas sand, etc., with a due retery hauling, gard for getting into the dumping places. It is assumed that the class of light work does not in itself offer a sufficient amount to warrant the exclusive use of a motor and is referred to in order to show the need of flexibility in the service. pears necessary that the motor should handle both the light and heavy teaming, also that it should handle any and all of for the reason that it may not be economical to separate the work so as to allow of certain classes being done by horse vehicles, principally because of the expense of maintaining two systems for the same purpose.

Let us consider just what this general teaming consists of and the methods here-toforc employed of handling it. A typical load is a dump-cart, drawn by one horse and carrying thirty cubic feet, which in wet sand will weigh 3600 pounds, with the driver and equipment two and one-half tons. Another type is the low-wheeled handy-wagon of about the same capacity. These vehicles travel at the rate of three miles per hour, either loaded or empty and the average haul is one-half mile. They are in service nine hours per day and it has been shown that they are moving about one-third of the time. This single-horse equipment, in addition to driver, represents a cost of \$1.25 per day, covering investment, interest, depreciation, feed, stable-labor, insurance, shoeing, veterinary and repairs of vehicle and harness. This is for 300 working days per year. An average for the year round represents the equivalent of six of these equipments in constant service.

Two methods were proposed at the outset for handling this work by motors. First by a truck of sufficient capacity to carry the heaviest of the loads, say two to three tons and second, by means of smaller cars to make more frequent trips. Neither of these methods appeared satisfactory.

Motor-trucks rated to carry two tons are claimed to have a very fair overload margin, about 50 per cent or probably safe at 30 per cent, so that for the purpose of first consideration the two-ton truck may be taken as the unit. Information as to the performance of these trucks is still rather indefinite, due to the lack of any very wide experience with them, but some of their possibilities may be approximated. The prices of the better known cars of this size reach close around \$3,000.00. The speed is designated at fifteen miles per hour. The cars generally are not claimed to carry greater weight than horse vehicles in the same class, but are claimed to move faster and farther with the same loads and in this consists their economy. From this it is seen that their economy increases with the length of haul. Short hauls and waiting are admitted to limit their usefulness and the motor people have not much to say on short hauls with heavy vehicles; so that the smaller the car can be held, considering the work, the more efficiency is to be had. The two-ton cars are all very heavy, ponderous, machines, particularly in length for turning in the comparatively narrow roads of a cemetery and everything considered, an experiment with

this type of car did not appear warranted at the time,

at the time.

With regard to the second method proposed, for handling the loads by more frequent trips of smaller cars: there appears to have been a fairly good try-out of the delivery car type, rated to carry 1,500 pounds and the choice in construction, make-up and appearance range around \$2,000.00 in price. This car is regarded as having 40 per cent of the capacity of the typical load before referred to. This means that to accomplish the work of one single-cart as before given, it would be necessary for the car to make two and one-half trips in the same time, or to ac-complish the work of two single-carts the car must make five trips in the same time. According to speed ratings of fifteen miles per hour it would just do this as compared with the three-miles-per-hour of the horse, And while the relative speed is only one of the features of comparison, still it appears from all standpoints that the motor service applied in this way could not be relied on to displace more than the two horses and it will be seen that this is not sufficient to justify the change.

It is necessary, for economy, that the power shall be applied so as to equal the long haul, or in other words that the motor shall be kept in nearly constant use. This has been done by using it as a tractor to draw the various loads in the form of trailers.

The car selected is of the delivery type, rated at 1,500 pounds carrying capacity, with four-cylinder engine, selective trans-mission, shaft drive, solid-rubber tires and equipped with a special tension draw-bar to absorb the shock and jar of starting and stopping heavy trailing loads. A platform body has been found the most convenient. The trailers are the several types of horse vehicles before referred to, equipped with short poles for pulling. These poles should have an eye sufficiently large to permit of ready coupling, or in other words room to go and come, but the space in front of the coupling-pin should fit this eye snugly so as to prevent lost motion and in this way the tension springs will relieve all jar. This shock and jar is really the menace to this method of hauling, but with the precaution described there appears to be no effect detrimental to the car or loads. It is expected that the trailers now in use may not have a very extended existence, due to the greater speed and more constant service imposed upon them, but expense of replacement with vehicles adapted to the purpose will not be excessive.

The trailers are deposited at various points as required and loaded in the regular course of work. The motor is then coupled on and delivers them at the unloading point. The trailers are usually taken one at a time when loaded, but sometimes, when empty, several are taken in train, to be distributed. By this means the motor is never idle, but kept moving about the grounds and is consequently able to do the work of several horses. It is a conservative statement to say that it displaces five of the horses handled in the manner previously described. The experience shows that the motor travels from thirty to fifty miles per day at an average speed of nine miles per hour, that is six to eight miles with load and about twelve miles maximum, unloaded. It is, of course, capable of higher speed, but usage has shown this to be safe on level roads with long curves. The capacity for pulling easily quadruples the carrying capacity of the car and a load of four tons is frequently drawn with it.

As to cost, we are still somewhat de-

As to cost, we are still somewhat dependent upon the original estimates as there has yet been no experience with repairs. These estimates were intended to provide a safe margin of cost at four dollars per day, including investment, interest and depreciation figured on complete replacement in five years, together with fuel, repairs and insurance. The car requires a crew of two

men. From this a ready comparison may be made with the expense of the five horse-equipments and drivers displaced, while the motor has many incidental advantages.

A Question Box inquiry regarding the admission of automobiles in cemeteries showed they were admitted with the usual limitations, in a large number of the cemeteries represented, and were prohibited in nine cemeteries.

A paper on the use of Calcium Chloride on cemetery roads was read by Walter G. Mortland, of Pittsburgh, Pa., and the same subject was informally discussed by S. G. Howe, of the Howe Chemical Road Co., Detroit, Mich. At noon the party departed by special train on the Baltimore & Ohio R. R. for Wilmington, Del., as guests of the Wilmington members of the executive committee. Autos were in waiting at the station on arrival in Wilmington and the visitors were soon enjoying the natural beauties of Brandywine park, en route to Wilmington and Brandywine Cemetery. This cemetery, established in 1845, comprises 33 acres. Samuel C. Penrose, the superintendent, has been a member of the A. A. C S. since 1904. After a brief stop the party proceeded to Riverview Cemetery, where luncheon was served on the lawn. Rev. D. E. Bushnell, of Chattanooga, Tenn., asked the blessing and Supt. William J. Quigley extended a cordial greeting to the assembled guests. Twenty-five ladies attired in white dresses did the serving. A group picture was taken here, with Mr. Albert W. Smith, president of Wilmington-Brandywine Cemetery, aged 94 years, as its central figure. Riverview Cemetery comprises fifty-two acres. It was incorporated in 1873 and is controlled exclusively by lodges and encampments of the I. O. O. F. and Knights of Pythias. Returning to the city the principal residence and business districts were covered and many places of historic interest pointed out. An itinerary of the trip in the form of a circular furnished with the compliments of J. B. Martin, undertaker, is authority for the statement that T. Coleman du Pont, president of the widely known powder company, is planning to build a boulevard 102 miles long through Delaware which he proposes to give to the state. One of the cars in the procession of autos was the motor funeral car operated by Lawncroft Cemetery, a new cemetery situated midway between Wilmington and Chester. The car will accommodate twenty-four persons and a casket. It weighs nearly five tons and cost \$7,500. Eugene F. White, vicepresident and manager of Lawncroft, was the driver.

The final day of the convention

opened with lowering skies and a drizzling rain, but this did not retard very many from carrying out the programme to the final letter. A special steamer, the Sylvan Dell, carried the party, numbering 175, to Riverton, where the nurseries and extensive greenhouses of H. A. Dreer, Inc., were inspected under the guidance of Manager Eisele. A

tions and heard the various parts of the work expressed and illustrated by viewing the grounds under the changed conditions, the marked improvement was soon very noticeable, as the different men returned to their various places and began putting into practice what had been suggested. In fact, it has been reported that one Board of Directors said to their superintendent, "Why, we don't know as we can send you, if you are coming back with so many radical ideas."

But a visit today to almost any one of



GOOD LAWNS AND ROADS, AND LOW, MASSIVE MONUMENTS IN WESTMINSTER CEMETERY, PHILADELPHIA.

business session was held on the boat, at which George W. Creesy, Salem, Mass., a charter member of the association, read the following paper on which he referred to the improvements made in cemetery management as a result of the efforts of this association:

CEMETERIES TWENTY-FIVE YEARS AGO AND TODAY. 1887—1911.

By Geo. W. Creesy, Salem, Mass. October 19, 1887, in the office of Spring

October 19, 1887, in the office of Spring Grove Cemetery, Cincinnati, Ohio, there assembled twenty-five superintendents, representing twelve states. We came together at the earnest solicitation of our late brother, Charles Nichols, of Newark, N. J. Our organization was formed with the object of improving the cemeteries of the country, with the father and founder as the first president.

In the next two or three years we visited many grounds that were well located, with good natural conditions, but suffering from want of care, making them unpleasant to look upon—gravel paths leading into rear lots, mounded graves, high corner posts, curbings, hedges, iron rails and fences, several kinds of stone in one lot, very few, if any, flower beds, fewer chapels, no crematories or mausoleums, and if such grounds had a superintendent at that time he was fairly well satisfied with such conditions.

But after much correspondence, in the next few years, our association had grown in prosperity and numbers, and as the superintendents met at the annual conventhe grounds where the superintendent is a member of the association will prove that the changes seem to warrant the expenditure of the superintendent's trip, and right here let me say that we also know of some superintendents, who have never joined us, copying ideas and plans laid out by our association and therefore receiving but not giving anything in return.

Now let us notice briefly what some of the improvements are, namely, many curbings and hedges removed; graves leveled with the sod; gravel walks seeded over, thus eliminating any visible division line; corner posts either flush with the grass or nearly so; one monument in the center, instead of a large number of stones; many flower beds and much ornamental shrubbery; artificial ponds spanned by rustic bridges and filled with water lilies, ctc.; memorial chapels, crematories and mausoleums, until now a drive into one of our cemeteries under the lawn plan is as soothing to the mind and eye as a visit to any well kept park, and the prospective buyer or older lot owner may not need to dread leaving the loved ones in such a spot as did our fathers.

Just a word in regard to the interior or office work. I venture to say that twenty-five years ago it was rather difficult to locate a grave that had been used some years before, and a stranger oftentimes had hard work to find the spot he wanted to see so badly. Today such a stranger may step into the office and there, under the card catalogue system, locate and learn about all the interments in the lot in which he is interested and be able to go to such lot without any trouble. Perhaps in this respect there is as great improvement as any other line. Nevertheless, we who have old

grounds must not stop nor be content until every portion of our grounds is under per-petual care and our cemetery is on a par with modern cemeteries where everything from the commencement has been sold with restrictions.

In closing let me say that I have here a few kernels of corn gathered at the first convention, and which as I recall the growth of our association and the development of the different cemeteries, remind me of Psalms 72, 16th verse, "There shall be an handful of corn in the earth upon the top of the mountains; the fruit thereof shall shake like Lebanon; and they of the city shall flourish like grass of the earth."

T. H. Little, secretary of Mt. Hope Cemetery, Chicago, discussed some phases of the many sided question of Cemetery Advertising in the paper which follows:

CEMETERY ADVERTISING.

By T. H. Little, Chicago, Ill.

In discussing the subject of cemetery advertising, I will make no attempt to deal with the various points of a cemetery suitto be brought out in advertising, nor will I deal with the various forms in which they may appear, but will confine myself rather to the principles as I see them, underlying the field, the production and the handling. I desire, at the outset, to say that this paper was not prepared with any idea or hope of converting any one to my views or belief in cemetery advertising, or with any intention of offending the sense of propriety of those of contrary views who feel that the ethics of our business should compel us to wait in silence for its coming.

As the dignity of an act rests in the manner of its performance rather in the act itself, I have not found, in dealing with the public, any feeling that there was a violation of the sacred obligation to society which we perform in stating through advertising what business we are engaged in. The public recognizes that the character, quality and stability of the improvements and provisions for both present and future care of cemeteries are largely, if not absolutely, contingent upon business success, and that if business is necessary to success, that it is but natural to attempt to bring purchaser and commodity together by legitimate means. All of the improve-ments made in the conduct and development of cemeteries, including the idea of the lawn plan, are the outgrowth of such study. If you or I have sought to throw around our cemetery that touch of nature, care and peace which lend an influence to soften sorrow, it is but another evidence that the mind keeps running to the study of influence on human nature. Advertising is one of the results also of that study in that it is a recognition of a principle that touches one of the springs of human action—the fact that people wishing to buy something do not go to some place they never heard of for it, and that it is not natural for them to do so.

Bring it home to yourself and the cemetery business you will probably acknowledge that in your city, other things being equal, the cemeterles which are most widely known are doing the most business—which is but the natural effect of a natural cause. There are few subjects upon which a city's population is so poorly informed as on things pertaining to cemeterles; the names of but a few at most are familiar; the locations are still less so, and the comparative desirability and prices practically not all. To reach a realization of these facts, with the absolute knowledge that you can never hope to serve those to whom your cemetery and the merits it may possess remain unknown, may decide you as to the wisdom of leaving such points to chance as little as possible.

There are those doubtless interested, or

who may become so at some time in undertaking to introduce their cemetery more generally to their community through the medium of advertising, who would like some one to lay down infallible rules detailing how it can be done, together with what mediums most profitably employed. It is not my intention to attempt an impossible task. I shall content myself with laying down a few principles gained from observation and experience with the hope that some one may profit thereby.

As to mediums applicable to cemetery advertising, I am a strong believer in the possibility of street car cards and newspapers as affording the most profitable that can be made to yield a maximum degree of efficiency at a minimum cost; but I am stronger in my belief that more is dependent upon efficient handling than the medium if reasonable care is exercised in its selection.

Do not imagine from the stress I lay on efficient handling that there is any notic influence to be exercised-it simply means the ability to realize the full effectiveness of advertising by producing complete harmony and co-operation between advertising and sales end-for the business that advertises must live up to its claims or forfeit all hope of permanent benefit, and to reap the just results from its advertising, must back it up by competency in salesmanship. Both successful production and handling of advertising seems to me to hinge largely upon psychology-not as to ability to read the character of specified individuals, but rather power to fathom with understanding and then present those things that touch the general springs of human action. As to production, we see a simple illustration of that understanding revealed in the presentation of a thing through an advertisement pleasing in design, convincing in thought, and distinct in individuality. Attractive in design because of recognition that the eye is sensitive to favorable impression, and that that impression serves as an introduction of the thought to the mind. Convincing in thought because an introduction of such a nature appeals to the intelligence of the individual if suggestive of a feature in connection with the thing advertised to be desired in the thing itself—and makes the advertising educational, really informative, and raises a standard that appeals to intelligence and inspires confidence. Distinct in individuality that it may readily gain remembrance and personality. These are principles applying to production.

Successful handling while it is dependent upon an advertisement's productiveness of opportunities, its ultimate gauge of success will rest on the results of the advantage taken of those opportunities, and an advertisement might almost as well not produce an inquiry as one the advertiser is not competent to handle. One must be alive to every fair advantage offered for the largest rewards are not won by mere advertising, but by fairly employed strategy. A good many advertisers guess at conditions and act on unfounded assumptions, and when they fail, wonder at it. Spasmodic advertising will seldom justify itself. Even the things that are best known must be everlastingly advertised to keep them well

Do not enter upon cemetery advertising with an expectation of reaping results early commensurate with the expenditure. It was belief when I began, and has been my experience since, and is a point upon which I laid special emphasis when the matter came before my Board, that results that would justify could not be obtained unless they were of a mind to stick out a fair trial, and, further, if they were entering upon cemetery advertising with the expectation of Its creating sales enough in advance need to justify the advertising, that they were doomed to almost certain disappointment. Time has proven that for every lot sale that has been effected in advance of need through advertising we have reaped as a reward of it

twenty when necessity compelled the pur-

In conclusion and apart from the general principles I have touched upon, I will say for the benefit of those who care to know that our advertising for the past five years has been confined almost entirely to the use of car cards, and that, while there may have been criticism of it of which we are not aware, there have been many compliments and good results.

The Memorial Committee reported as follows .

MEMORIAL COMMITTEE REPORT.

Your committee reports as follows:

WHEREAS, It has pleased Almighty God to call to their reward two of our long-term members, Mr. Levant L. Mason and Mr. Timothy McCarthy, during the past year,

RESOLVED, That this association show its appreciation in an adequate manner, both by vote and by incorporation of the same with its records, of the more than twenty-two years of staunch loyalty unwavering support given both by Mr. Mason and Mr. McCarthy.

As president of "Lakeview," Jamestown,

N. Y., Mr. Mason was impressed with the importance and far-reaching influence of our association, and assisted in furthering its activities with the strength of a man who understands and acts with conviction.

Mr. McCarthy, the original and artistic superintendent of "Swan Point," Providence, R. I., was the magnetic and vigorous leader in all our deliberations. Humorous and jovial, yet serious in the expression of opinion, his judgment and advice were of inestimable value to the association. A child and a lover of nature, nature loved him in return and was bountiful to him, singleminded in all things, as we saw and knew him, at our meetings, so was he in his offlcial position and under his own roof-tree with his family, and though this brilliant light had disappeared below our horizon, the afterglow remains to mellow, to warm us, and to remind us of how much there is in such a man, over which death has no power and the grave no victory. May the remembrance of him be entwined with memories as beautiful and enduring as the master-piece of his lifework, the incomparable boulder wall at "Swan Point."

Wherefore, be it resolved, That a suitably executed copy of these resolutions be sent to the respective families of the deceased and to the corporations of which they were the worthy members, J. P. Harrington, George W. Creesy, H.

Wilson Ross.

The officers elected for the ensuing year are: President, John J. Stephens, Green Lawn, Columbus, O.; vicepresident, H. M. Turner, Rose Lawn, St. Paul, Minn.; secretary-treasurer, Bellett Lawson, Jr., Elmwood, Chicago,

The committee on general resolutions thanked the executive committee for their untiring efforts, and every one who in any way contributed to the success of this most enjoyable con-

The party went by train from Bristol to Morrisville, N. J., where Wm. H. Moon and James F. Moon, of the Wm. H. Moon Co., nurserymen, were the hosts. Big wagons were provided to drive the visitors over a portion of the extensive nurseries. The inclement weather made it necessary to serve luncheon in the packing shed. Evergreens are made a special feature here.

Clipped hedges of Norway Spruce extending about 1,000 feet on either side of a roadway excited frequent comment as did the excellent condition of the grounds. Through the courtesy of the Chamber of Commerce of Trenton automobiles were provided to take the visitors from Morrisville to that city. Greenwood and Riverview, the principal cemeteries, were visited. The latter, originally a small Quaker burial ground, now comprises about forty acres beautifully situated overlooking the Delaware river. W. H. Atkinson, the superintendent, is an enthusiastic member of the A. A. C. S. A ride through the principal streets of the city terminated at the State Fair Grounds, where a fine luncheon was spread and subsequently the final business session was held. Milwaukee was chosen for the 1912 meeting.

The boat ride from Trenton to Philadelphia was the final number on the four-days' programme. Music and singing continued until the dock was reached at 9 o'clock.

Philadelphia has made a new record for A. A. C. S. conventions, and one that will not soon be broken. The contributors to the entertainment were exceedingly generous, which enabled the local committee to entertain in a manner not heretofore attempted on such a scale. The souvenir programme was the most elaborate that has yet been issued. The embossed title on the cover was appropriately printed in silver in keeping with the twenty-fifth anniversary of the association. A copy of the programme will be mailed to all members who were not present at the convention.

The Executive Committee for the convention was made up as follows: George M. Painter, chairman, Westminster Cemetery, Painter, chairman, Westminster Cemetery, Philadelphia; Charles B. Jefferson, secretary and treasurer, West Laurel Hill Cemetery, Philadelphia; W. N. Kiefer, Ardsley Burial Park, Philadelphia; John Stratton, Mt. Peace Cemetery, Philadelphia; J. G. Kline, Fernwood Cemetery, Delaware Co.. Pa.; S. C. Penrose, Wilmington and Brandywine Cemetery, Wilmington, Del.; C. G. Simon, Lawnview Cemetery, Philadelphia; Proud, Laurel Hill Cemetery, Philadelphia; William Winter, Northwood Cemetery, Philadelphia; W. J. Quigley, Riverview Cemetery, Wilmington, Del.; W. H. Del.; W. Trenton, Cemetery, Wilmington, Atkinson, Riverview Cemetery, N. J.

Auxiliary Committee consisted of Mrs. George M. Painter, Miss E. V. Simmons, Mrs. Charles B. Jefferson, V. Simmons, Mrs. Charles B. Jefferson, Mrs. L. M. Phile, Mrs. J. G. Kline, Mrs. C. G. Simons, Mrs. W. N. Kiefer, Mrs. W. J. Quigley, Mrs. A. C. Linton, Miss Margaret Kiefer, Miss Kathryn Moody, Miss Luella Stratton, Miss Viola Maier, Mrs. William Winter, Miss Bessie Penrose.

The Auxiliary furnished chaperones for shopping, tours, and sight coaling around.

shopping tours and sight seeing around Philadelphia.

THE EXHIBIT

The best exhibit that has yet been seen at a convention of this association was made in a suite of parlors set apart for that purpose.

More than a hundred photographs of cemetery views, maps, section plans, blue prints of buildings, road construction, samples of records and various devices of interest to cemetery



MAUSOLEUM AND ITS SETTING, WESTMINSTER CEMETERY.

superintendents were displayed on a large board for inspection.

Jos. Bomgardner, of the Bomgardner Manufacturing Co., Cleveland, O., had one of his casket lowering devices in operation and also exhibited models of his church trucks and pedestal, and casket elevator for use in cemetery vaults, etc.

Bellett Lawson, Jr., Chicago, Ill., had his concrete post mold on dis-

H. M. Wellman, Oshkosh, Wis., exhibited his "King" grave lowering

The exhibit of lawn mowers was a particularly interesting feature, for Philadelphia, it must be known, produces more high grade lawn mowers than any other city in the United States. Mowers from here are used in the principal parks and cemeteries of this country, and the two leading manufacturers availed themselves of the opportunity to display their machines to best advantage.

The Philadelphia Lawn Mower Co., 31st and Chestnut streets, Philadelphia, Pa., manufacturers of the genuine "Philadelphia" lawn mower and the originators of all-steel lawn mowing machines, displayed eight styles of hand mowers, a lawn trimmer and a handsomely finished sample of their new all-steel mower, styled "The Graham." The exhibit was in charge of N. F. Cressman, sales manager.

The Supplee Hardware Co., manufacturers of the "Pennsylvania Quality" mowers, Market street, Phila-

delphia, Pa., displayed ten machines, including a Pennsylvania Grand horse lawn mower, a lawn cleaner and rake, three Pennsylvania under cut trimmers and five hand lawn mowers of different styles. A special interest was attached to this exhibit because of the guessing contest which was confined to the members of the association and their wives. The company offered four prizes to the persons who guessed most accurately the number of parts in a Pennsylvania, Jr., ball bearing lawn mower. The correct number was 237. The prize winners, their guesses, and the prizes won were as follows: W. N. Kiefer, Ardsley Burial Park, Glenside, Pa., 233, first prize, a Pennsylvania, Jr., ball bearing mower; Perry W. Goodwin, Lake View, Jamestown, N. Y., 231. second prize, Pennsylvania undercut trimmer; H. Wilson Ross, Newton, Newton Center, Mass., 229, third prize, Pennsylvania undercut trimmer; Mrs. Geo. W. Creesy, Harmony Grove, Salem, Mass., 225, fourth prize, Pennsylvania undercut trimmer. The consolation prize, a Great American ball bearing mower. went to M. H. Winters, Woodmere, Detroit, Mich., who guessed 697. The machines will be delivered free of cost at the homes of the prize winners. J. S. Bonbright, superintendent of sales, was in charge of his exhibit.

AMONG THOSE PRESENT

The following names of those present is taken from the secretary's register. list is incomplete, as many failed to regis-Pittsburgh, Pa.; William Falconer, E. G. Carter and wife and Mrs. C. M. Gilett, Chicago, Ill.; J. T. Yates and wife, Lynchburg, Va.; James M. Driscoll, Brook-line, Mass.; Wm. Crosbie, Washington, Pa.; Arthur W. Hobert and wife and Miss Hobert, Minneapolis, Minn.; Mrs. R. M. Jaeger, Brooklyn, N. Y.; Robert D. Boice, Geneseo, Ill.; J. M. Broughton and wife, Norfolk, Va.; F. S. Newcomb and E. Rowley, New London, Conn.; Wm. Halbrooks, wife and doughter Fragratile. wife and daughter, Evansville, Ind.; A. H. Plant and wife, Kankakee, Ill.; Bradley S. Cummings and wife, Linden, N. J.; Frank R. Eurich and wife, Detroit, Mich.; Wm. J. Quigley and wife, Wilmington, Del.; H. Wilson Ross and wife, Newton Center, Mass.; B. L. Gallagher, Courtland, N. Y.; John McCosh and wife, Cedar Rapids, Ia.; Jacob Schwab, Forest Park, Chicago, Ill.; Robert Puckett Turner, Norristown, Pa.; Walter and wife, Birmingham, Ala.; E. A. Merriam, Baltimore, Md.; Mrs. E. E. Hay, Erie, Pa.; Battmore, Md.; Mrs. E. E. Hay, Elle, Pa., Luther Cline and C. C. Duble, Dayton, O.; Matthew P. Brazill, St. Louis, Mo.; R. Scrivener, Chas. J. Gallon, Hartford, Conn.; R. N. Kesterson, Knoxville, Tenn.; S. C. Penrose and ladies, Wilmington, Del.; Perry W. Goodwin and wife, Jamestown, N. Y.; Lewis D. Wilson, Isaac Kershaw, Philadel-phia. Pa.; A. E. Todt and wife, St. Louis. Mo.; Geo. A. Burton and wife. Coldwater, Mich.; John B. Meisch, Rochester. N. Andrew Hertzel, Peter Olson, Warren, Pa.; S. W. Rubee, Marshalltown, Ia.; O. W. Crabbs, Muncie, Ind.; F. L. Howard and wife, Linden, N. J.; Henry S. Adams and wife, Boston, Mass.; Thomas White, Fairhaven, Mass.; J. A. Reed and wife, Canter of Events, P. Willie, St. Pouls, Mass. ton, O.; Frank D. Willis, St. Paul, Minn.;

T Donlan, Wilmington, N. C.; T. L. H. Wiltberger, Washington, D. C.; Fred R. Diering and wife, Woodlawn, New York City; Geo. Gossard, Washington C. H., O.; E. C. Smith, Manchester, N. H.; James Warren, Jr., Providence, R. I.; J. S. Medary, La Crosse, Wis.; Walter H. Wheeler and wife, Indianapolis, Ind.; Chas. Fitzgeorge and wife, Trenton, N. J.; J. E. Carpenter, J. L. Halstad, Nyack, N. Y.; Benj. Kuykendall, Towanda, Pa.; M. H. Winters, wife and daughter, Detroit, Mich.; John W. Keller, Rochester, N. Y.; Wm. Lord and wife, Lawrence, Mass.; Wm. II. Atkinson, Trenton, N. J.; D. E. Bushnell, Chattanooga, Tenn.; T. H. Little, Chicago, Ill.; W. H. Druckemiller, W. Edwin Druckemiller, Sunbury, Pa.; R. E. Leavitt and wife, Melrose, Mass.; B. Sydney Youden, Wm. B. Jones, Pitts-B. Sydney Youden, Wm. B. Jones, Pittsburgh, Pa.; J. H. Erskine, Manchester, N. H.; W. A. Kiefer, wife and daughter, Philadelphia, Pa.; Geo. Lane, Lynn, Mass.; Thos. Wallis and daughter, Chicago, Ill.; Jas. Currie, Milwaukee, Wis.; Chas. T. G. Flaherty and wife, Albany, N. Y.; John Reid, Harry P. Reid, Detroit, Mich.; Wm. Allen, Pittsburgh, Pa.; J. P. Hanwigette, Particular Programmer. Pittsburgh, Pa.; J. P. Harrington, Provi-aence, R. I.; Dwight B. Snow, New Haven, oence, R. I.; Dwight B. Snow, New Haven, Conn.; J. J. Cunningham, Long Island City, N. Y.; J. S. Templeton, Chicago, Ill.; James J. Scott, Towanda, Pa.; C. G. Simon, Miss Kathryn Moody, J. M. Stratton, Miss Luella Stratton, Philadelphia, Pa.; Forrest McCoy and wife, Cleveland, O.; Chas, M. Chamberlain, Maspeth, L. I., N. Y.; Geo. W. Voorhees, Norwalk, Conn.; E. King and wife, Springfield, Mass.; W. C. Grassau and wife, Springfield, Mass.; W. C. Grassau and wife, Brooklyn, N. Y.; F. D. Clark, Toronto, wife, Brooklyn, N. 1; F. D. Claik, 1010ht, Ont.; F. H. Rutherford, Hamilton, Ont.; Geo. M. Painter and wife, J. O. Stuek, Wm. H. Huley and wife, Philadelphia; John G. Kline and wife, Fernwood, Pa.; Chas. B. Kline and wife, Fernwood, Pa.; Chas. B. Jefferson and wife, Mrs. L. M. Phile, Phila-delphia, Pa.; Wm. J. Proud, Miss Bertha Linn, Laurel Hill, Philadelphia; John J. Stephens and wife, Columbus, O.; Geo. W. Creesy and wife, Salem, Mass.; F. Sheard, Rochester, N. Y.; Miss Nellie Kiefer, Philadelphia, Pa.; W. A. Addicott, Sharon, Pa.; H. M. Turner, St. Paul, Minn.; A. R. Gross and wife, Mt. Greenwood, Chicago; G. Schomium R. M. M. and wife, Mt. Greenwood, Chicago; G. Scherzinger. Fond du Lac, Wis.; Mr. Bellett Lawson and wife, E. A. Lawson and wife and son, Harrisburg, Pa.; Miss E. V. Simand son, Harrisours, Fa.; Miss E. v. Shin-mons, Philadelphia, Pa.; C. W. Dwyer, Du-buque, Ia.; Bellett Lawson, Jr., and wife, Chicago, Ill.; Frank Primrose, Baltimore, Md.; S. E. Harburger and wife, Atchison, Kan.; A. Reinhardt and wife, Orange, N. J.; Daisy M. Blain, Mrs. A. W. Blain, Detroit, Mich.; Jno. A. Hepler and wife, Reading, Pa.; Davis Casselburg, Philadelphia, Pa.; Harry Tieman, New Oxford, Pa.; Wm. Boone and wife, Syracuse, N. Y.; R. J. Haight and wife, Chicago, Ill.

CEMETERY SUES CITY

The Cave Hill Cemetery Company of Louisville, Ky., has filed suit against the city and the Commissioners of Sewerage of Louisville for \$5,650 damages. The plaintiff alleges that in the construction of a sewer with connections at Willow and Transit avenues the defendants failed to provide drainage sufficient to carry off the water from heavy rainfalls. It is alleged that on July 4, 1910, a heavy rain fell and a pond of water accumulated which caused the retaining wall around the cemetery to break with the result that much mud, sand and gravel were deposited on the premises of the plaintiff and much damage thereby resulted.

The case has not yet been heard in Court.

MISSOURI CEMETERY MEN MEET

The annual convention of the Missouri Park and Cemetery Improvement Association was held at the Maryland Hotel, St. Louis, August 22.

President Wm. Mittelbach, of Boonville, Mo., called the meeting to order, and Mr. A. E. Todt, of St. Louis, delivered the address of welcome, to which Mr. R. Kell, of Sedalia, Mo., responded. Mr. J. A. Schmiemeier, of St. Louis, Mo., was chosen secretary pro tem on account of Secretary Burch, of Jefferson City, having been called away to Denver on the eve of the convention.

The president delivered his annual address in which he spoke of the success in the past and the good prospects for the future of the association. Though still small in number all signs indicated that Missouri would soon have as strong an organization as many other states.

M. P. Brazill, of Calvary, St. Louis, read a paper on the "Education of Lot Owners," which was well received and very instructive. Copies of the paper were distributed.

J. A. Schmiemeier, of St. Matthews, St. Louis, read a paper on "Perpetual Care." It was his opinion, and also that of those present, that one dollar per square foot would be ample to care for a lot. This amount could be proportionately reduced for extra large lots according to the size of the lot. Cemeteries under the Lacoon plan could, he thought, get along with less.

Wm. Mittelbach read a paper on "Underground Vaults," and illustrated it by drawings.

The afternoon was devoted to visiting the cemeteries in the southern part of the city. An evening session was held at St. Matthews Cemetery, in the spacious new office and waiting room. Supper was served under big tents on the lawn.

R. M. Reker, book and record keeper of SS. Peter and Paul, read a paper on records that was highly complimented.

A resolution was passed designed to influence cemetery boards to forbid Sunday burials.

The following officers were elected: A. E. Todt, St. Louis, Mo., president; David Koeller, St. Louis, Mo., vicepresident; Mrs. Bess R. Parker, Carthage, Mo., secretary-treasurer.

The next convention will be held at Columbia, Mo.

A vote of thanks was extended to

all who had contributed to the success and entertainment of the convention.

The second day was spent visiting the North St. Louis cemeteries and the Missouri Botanical Garden.

NEW ENGLAND CEMETERY ASSOCIATION

The next meeting of the N. E. C. A. will be held Sept. 22, 1911, at Forest Hills and Mt. Hope Cemeteries, Boston, Mass., at 1 p. m.

The meeting was called by invitation from Superintendents Adams, of Forest Hills, and Ross, of Mt. Hope.

Messrs. Adams and Ross are looking for a large attendance.

At this meeting will be presented the reports from the members that went to the National Convention. The party will meet at Forest Hills Cemetery Office, at 1 o'clock, Friday, September 22.

THE COVER ILLUSTRATION

The illustration of the entrance to beautiful Spring Grove Cemetery in Cincinnati, on the front cover, is characteristic of what can be accomplished in beautifying the entrance of any cemetery or park. Its design is one of those carefully thought out with the idea of creating harmony between the gate lodge, granite piers and general surroundings.

The main drive gate is 14 feet between piers, and 9 feet high at center. The walk gates are 5 feet wide between piers. The workmanship is of the highest class, all intersections halved and drawfiled. The ornate relief is all hand forged by the best skilled smiths and assembled by "Stewart made" mechanics.

The gates shown have been in place for fourteen years and hang perfectly. They were designed by Samuel Hannaford & Sons, architects of Cincinnati, and made and erected by the Stewart Iron Works Co., of Cincinnati.

The importance of an appropriate entrance and fence cannot be overestimated. They enhance the value of the grounds, and offer that sense of security, which invites the public confidence, and from a business standpoint is well worth the consideration of any cemetery board.

We expect to show in future issues other examples of cemetery entrances that have been carefully planned and executed.

APRESERVES Roads Prevents Dust~



A road in the Metropolitan Park System, Boston, built with Tarvia X

The Ideal Park Road

For parks and cemeteries, the requirements for a proper road surface are that it shall be dustless, quick drying, mudless, noiseless, cleanly and durable. Tarviated roads fulfill these requirements perfectly.

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City Planning. Rochester. Outlook, New York. 98:467-8. July, '11.

City Plans and Planners, C. M. Rob-Sur. 26:397-400. inson. Illust. June 3, '11.

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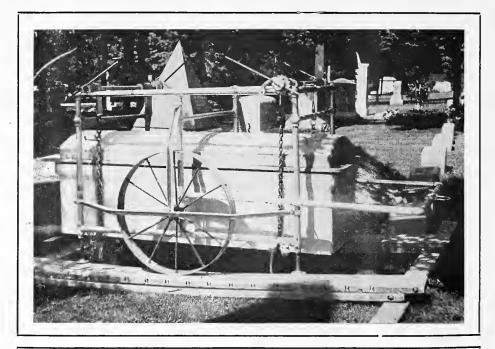
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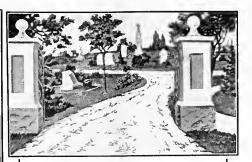


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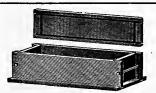


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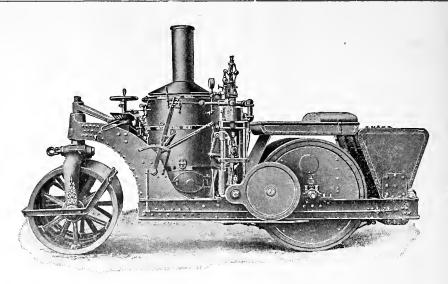
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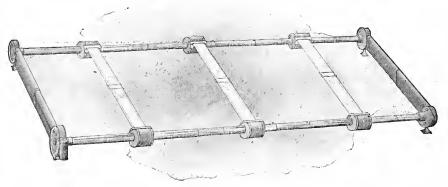


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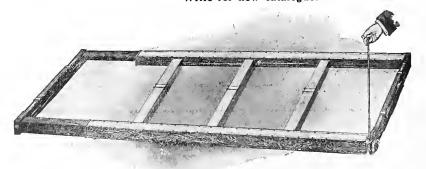
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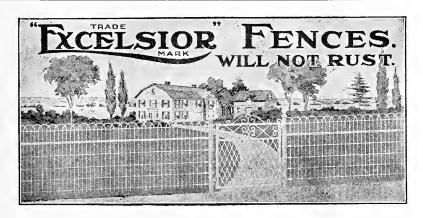
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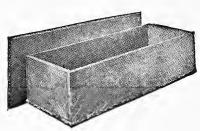
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Georges Benoit Levy, the standard French work on Garden Cities.

Part I of the Transactions of the Massachusetts Horticultural Society, for 1911, contains some interesting horticultural papers and discussions, among which are the following: "Gardening for and by Amateurs," by J. Otto Thilow; "the Local Plant Doctor," by Prof. H. H. Whetzell; "Summer Blooming Bulbs," by Isaac Henderson; "the Outlook Countryward," by L. H. Bailey; "The Horticultural Awakening of New England," by John H. Hale.

From the U.S. Department of Agriculture: The Blister Rust of White Pine, by Perley Spaulding, Bulletin 206 of Bureau of Plant Industry; Community Work in the Rural High School, by Dick J. Crosby, reprint from the department year book for 1910; and Circular No. 37 from the Secretary's offce on a National Law to prevent importation of infested or diseased plants.

Rules and Regulations of the Harhisburg Cemetery Association, Harrisburg, Pa.; illustrated with views in the cemetery.

TRADE PUBLICATIONS

"Peonies for Fall Planting," from Ellwanger & Barry, Rochester, N. Y. Fall and Spring Price-List of Frank H. Wild Floral Co., Sarcoxie,

Vaughan's Seed Store, Chicago; Autumn 1911 catalog.

Fall Bulb catalog from C. S. Harrison's Select Nursery Co., York, Neb.

A Summer and Autumn price-list of Florist's Bulbs and Seeds for Forcing and Planting from Arthur T. Boddington, 342 W. 14th St., New York City.

"Wheat, Grasses, etc., for Fall Growing," and "Henderson's Autumn Catalog," from Peter Henderson & Co., New York City.

PUBLISHER'S NOTES

The publisher would advise subscribers who are in the habit of filing the issues of Park and Cemetery and are desirous of securing back numbers, that many numbers are now out of print, especially those containing articles on Perpetual Care in Ceme-

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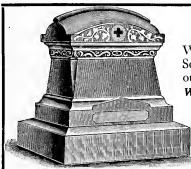
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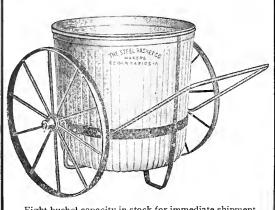
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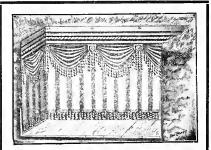


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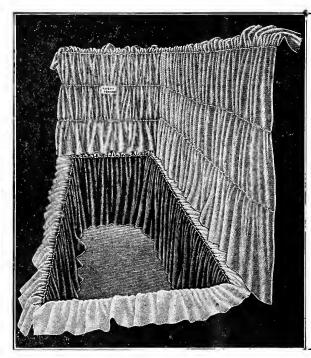
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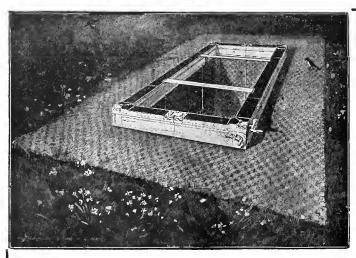
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PERSONAL

Mr. Charles Downing Lay, secretary of the American Society of Landscape Architects, has been chosen to succeed Mr. Samuel Parsons as superintendent of the New York park system. Mr. Lay was born in Newburg, N. Y., in 1877. Mr. Julius Burgevin, who has been complimented by the mayor on the condition of the Bronx Parks under his care, was considered for the posi-

Mr. W. A. Peace, a park authority, of Cleveland, O., accompanied city officials of Canton, O., recently on a tour of the proposed new municipal park along the west creek. Mr. Peace will make suggestions for park improvements for-which council has appropriated \$8,000.

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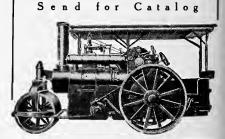
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Concluded from page 644.

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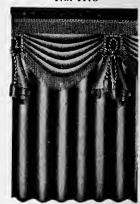
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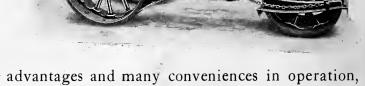
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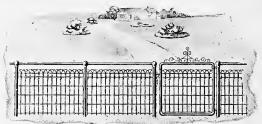
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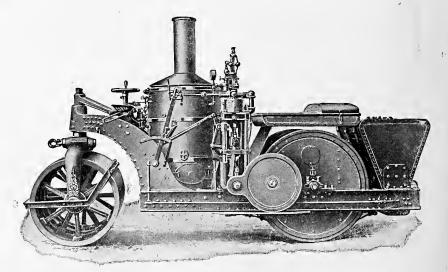
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McCullough Park, Muncie, Ind.
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Governor's Mansion and State House
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MAYOR'S OFFICE,

W. I. Thompson, Mayor, Henderson, Ky., July 12, 1911.

40

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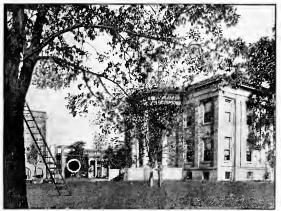
Very truly yours I. W. (THOMPSON,) Mayor.

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Gentlemen:-Your methods are certainly practical and based on correct principles and the execution of the work was thorough and conscientious. We have every confidence that the money spent was a wise and profitable investment. Some of the big forest trees if lost could not be replaced at any price.

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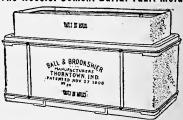
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PARK AND CEMETERY

AND LANDSCAPE GARDENING_

Vol. XXI Chicago, October, 1911

No. 8

Training for Landscape Architecture

That there is still plenty of room at the top should be an encouraging feature of present-day strenuous life to the aspiring young man. But to meet the requirements of these top-opportunities calls for preparation, ability and character that comparatively few possess, or are even willing to endeavor to possess, on account of the work entailed for that end. One is impressed with this idea, in connection with the profession of landscape architecture, on perusing the pamphlet issued by Harvard University concerning its Department of Landscape Architecture, and Harvard is not now alone in promoting this profession. But the plans of study laid down and the requirements set forth for attaining degrees in this occupation suggest most emphatically that to become a proficient landscape architect the young aspirant must make up his mind to work; and yet there may also be gathered from the pages of this pamphlet the assurance that proficiency in the several necessary studies means an equipment for a delightful life-work that will make the top easy of attainment, as practice develops the faculties upon so certain a foundation. There have, however, been great men in every occupation of life who have succeeded without the help of college training, but a college education today gives the student so great an advantage for professional service that our advice is "get it if you can." The Lowthorpe School of Landscape Architecture, Gardening and Horticulture for Women, at Groton, Mass., which was founded in 1901 by Mrs. Edward Gilchrist Low, and which was incorporated in 1909, is designed to train young women who desire to take up a life work under the terms Landscape Architecture, Landscape Gardening and Horticulture, in which there is an excellent and attractive field. This school was established by private benevolence, is still far from self-supporting.

The Municipal Congress and Exposition

The International Municipal Congress and Exposition which was held in Chicago, September 18-30, under the auspices of the city and a number of its leading organizations was, like its predecessors and kindred affairs, a highly interesting and instructive event. It attracted numbers of visitors, unquestionably of the intelligent classes, and practically all the leading features of the exhibition found interested engineers and students among the people who halted to study and investigate. Besides the exhibits of maps, plans and models of municipal public works, the laying out of towns and cities and the apparatus and plants for the up-to-date necessities of city life, the sessions of the Congress covered a broad field, and were held day and evening throughout the time prescribed for the Exposition. Prominent experts in city development and the conduct of municipal affairs presented their views in lectures and discussions, and were assisted by leading officials from the larger American cities. City charters, commission government, municipal accounting, efficiency and business, municipal museums, city planning, public utilities and improvements, taxation, public schools, parks and playgrounds, as well as the engineering requirements for a city's health and welfare, all received particular and close attention. During the evenings there were picture talks on home and foreign municipalities, and moving picture exhibits of modern road-making, the operation of fire fighting outfits on land and water, and other attractive matters connected with city development. The exhibits of the large manufacturers of road making machinery and the requirements of indoor and outdoor municipal work added to the general completeness of the Congress. Particularly noticeable among many civic exhibits was that of Des Moines, Ia. This city has been conducting a vigorous educational campaign on up-to-date lines to promote growth both in residental citizenship and business interests, and in the way of civic improvement is rapidly forging ahead and setting an example to other cities.

Children's Play Parks

Mr. L. H. Weir, field secretary of the Playground Association of America, suggests that the perfect system of playgrounds for a city is "to have them so situated that one will be within a quarter of a mile of every child ten years old, and that larger grounds will be within at least one-half mile of each child in the city." This is of course theoretical, but a very few years ago the whole subject of city play-parks for the children was theoretical, and but few believed them practicable. The point of view is now entirely changed, and such parks have almost suddenly come to be declared essential features of up-todate municipal requirements. To carry out the suggestion in our older established cities is beyond reasonable expectation, though much more will have to be done than has yet been accomplished; but in our younger cities, it is quite possible and should be seriously considered while land values are low and business has not appropriated every play-park possiblity.

A Suggestion

While signs of the awakening of interest in the condition of the rural cemetery are quite frequently apparent in certain communities throughout the country, any general disposition to improve is still a long way off, in spite of the educational efforts to inspire the necessary spirit often attempted.

w w w

In a paper by Mr. F. H. Rutherford, of Hamilton, Ont., read at the recent Philadelphia convention of cemetery superintendents, on "Reorganizing an Old Cemetery," appeared a suggeston that the judicious planting of portions of the cemetery would afford the superintendent one of the most interesting studies, as well as one of the greatest pleasures of his work. There is no question as to this; and why might not the idea be taken up by any interested lot owner or village official and adapted to the neighboring burying ground. A visit to a nearby city, having a well cared for cemetery, would offer lots of examples of what trees, shrubs and plants to use and the manner of their planting, and in every country place the native shrubs and wild things are just the material to use, providing taste and good judgment are displayed. It needs study, to be sure, but the study will be beneficial and absorbing, and the laying out and planting will be most interesting, and to see the success of the work in due course, not only in its detail, but in relation to the whole burial plot will repay for the time and labor expended a hundred-fold. Let some of our active village citizens try it!



THE MAKING of a PARK SYSTEM IN LA CROSSE

No better illustration could be found of the making of a park system, by a small city than the recent experience of La Crosse, Wis., the interesting story of which is told in a recent report by John Nolen, of Cambridge, Mass., landscape architect of the system. It should be recalled that three years ago it had not even a park commission, and it is less than two years since the actual work of park construction was begun. Yet it has today the substantial framework of a comprehensive park system that is equaled by few cities of the same size. This achievement is so notable and the steps by which it has been brought about are so little known, even to many of the citizens of La Crosse, that park men will be interested in Mr. Nolen's story of the methods that have been used.

The beginning of parks in La Crosse is to be found in Pettibone Park, a

naturally beautiful Island in the Mississippi River, directly opposite the business section of the city, but unfortunately situated within the boundaries of the state of Minnesota. Established in 1890 as a public pleasure ground, through the generosity of Mr. A. W. Pettibone, this Island Park at first supplied the demand for public parks and then created an insistent demand for more. Never a city park in a complete sense, it has, nevertheless, always been open to the free use of the people. Its administration is vested in a special park board appointed by Mr. Pettibone and the funds for the acquisition of the land, for construction and for maintenance have been provided by the same generous and public-spirited individual. He has placed in the hands of the board the sum of \$50,000, the income from which is to be used in the proper maintenance of the park. Pettibone Park contains about two hundred acres. It has an exceedingly irregular shore line, picturesque and beautiful lagoons; and if properly developed might easily rival the famous Belle Isle Park of Detroit. Indeed, the views of River scenery are much finer than those from Belle Isle. But to make Pettibone Park a thoroughly satisfactory recreation ground, it should be raised securely above the high water of the Mississippi River and the control and jurisdiction of the Island transferred by the legislature of Minnesota to the city of La Crosse.

Yet, after all, Pettibone Park only prepared the way. The real beginning was made when the common council of La Crosse on May 15, 1908, passed the ordinance creating two park districts and establishing a



LEVEE PARK AS IT WILL APPEAR WHEN COMPLETED, LA CROSSE, WIS.

Board of Park Commissioners. By this ordinance a non-political, unpaid commission of four members was provided. These commissioners were to be appointed by the mayor, subject to the approval of the common council. pay for themselves; (4) that the adoption of a permanent park policy is more than likely to bring rich gifts of land and money for park purposes. Of the general soundness of these views, the audience was convinced, and at the conclusion of the meet-

comprehensive, well-distributed system in which the needs of each section were adequately and fairly provided for. The situation of the city is remarkable and of great beauty. With one of the finest parts of the Mississippi River on the west and a



TYPICAL LA CROSSE RIVER SCENERY

The next step was the selection by the Board of a landscape architect as its expert adviser and the arrangement soon after for a public mass meeting to present to the general public the tentative plans for a park system and the reasons for such a system in a city like La Crosse. The meeting was held in the opera house. The arrangements were unusually well made, the local newspapers cooperating heartily and as a result a large and representative audience completely filled the hall. The may-Mr. Nolen was the or presided. principal speaker and pointed out the value of parks and the direction the work should take.

The four conclusions to which the addresses of the evening pointed definitely were: (1) That park lands for the city of La Crosse would never again be so cheap; (2) that once acquired, they would steadily increase in value; (3) that the experience of every city that has judiciously undertaken park improvements had demonstrated that they

ing, resolutions were unanimously adopted providing for a park commission and the levying of a one mill tax to be set apart and expended under the direction of the park commission for park purposes.

At a meeting of the council held a few days later, this enthusiastic action of the people was confirmed by the levying of a one mill tax for parks and later by the issuing of bonds for seventy-five thousand dollars for the purchase of land and for the necessary construction. Thus in six months the work of park making in La Crosse was successfully inaugurated.

It was the aim of the park commission and its landscape adviser to select property that was naturally fitted for park use, that could be developed economically, that would reflect and preserve the characteristic and beautiful topographical features of La Crosse, and that, when improved, would constitute a whole, each part having relation to every other part, and together forming a noble range of high and rugged bluffs on the east, it occupies a broad and fertile vailey, offering an ideal site for both business and residence purposes. The most striking and characteristic natural features are, of course, the river and the bluffs. It was decided at once that these should be included in the park plans and that all the forms of recreation that river and bluffs make possible should be provided.

The existing parks available as a nucleus for the new system were the two half blocks in the built-up section of the city, Myrick Park and the Losey Boulevard. After a great deal of investigation on the ground, supplemented by careful study and plan making, the following system of parks, parkways, squares and playgrounds was adopted:

(1) Copeland Park. This is a tract of more than twenty acres in North La Crosse with a frontage of half a mile on the Black River, commanding some of the finest views of the Minnesota bluffs. A wide promen-

ade runs all along the water front and the plan for the park includes provision for many forms of active recreation and quieter relaxation.

(2) Levee Park. This will contain

park commission in playgrounds for the children.

(5) Adams Street Playground. Although smaller in area, this property corresponds in character and devel-

of West Avenue. This property is not imperatively needed by the city for immediate use, but is a valuable reservation for the future.

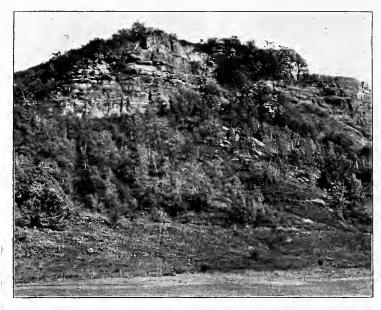
(9) Main Street Square. The city already owns one-half this square. By purchasing the other half, which can still be had on reasonable terms, a splendid open space would be secured in the heart of the city.

(10) Reservation on the viaduct between North and South La Crosse. Such a property is now easily secured and would provide a park for the future at a central situation.

(11) Inter-State Fair Grounds. This tract of 37 acres is now owned by the city and it is proposed later to make it the principal athletic ground for the older boys and young men of the city. Here there is room for a very complete provision for all the field sports, tennis, etc. The location is admirable for the purpose.

(12) Parkways. It is proposed to connect all these parks, squares and playgrounds by a complete system of parkways and boulevards. A circuit of fifteen miles might not be entirely free from some relatively commonplace sections, yet most of it could easily be made very attractive. Even now a very large percentage affords views both near and far that could not be equalled by the best parkways in the larger cities.

The methods followed at La Crosse, a city of but 31,000 population, it should be remembered, have been so



GRANDAD BLUFF, LA CROSSE, WIS., PARK SYSTEM.

about twelve acres and is happily situated at the natural water approach to the city and close to the business center. The plan for this park is more ornamental than Copeland Park. The water front will continue to be used for business purposes, but the undeveloped area between the river and the railroad tracks will be filled, improved and made available for recreation.

(3) Grandad Bluff and Miller's Coulee. The park which it is proposed to create at this point will be the largest and most beautiful in La Crosse. In fact, few cities have such an opportunity. Grandad Bluff is the highest in the neighborhood of La Crosse and rises majestically to a height of 1,172 feet. The Coulee, which nestles in its side, affords a type of scenery of great attractiveness. It is beautiful and restful, as well as adapted for a pleasure ground for city people as any that can be conceived. This property is only partially acquired, but when completed it will probably include over four hundred acres. It is as good an illustration of ready-made park as could be found, and except for road making, the cost of its improvement will be slight.

(4) West Avenue Playfield. The acquisition of this three acre field at West Avenue and Jackson Street—more than a full city block in extent—illustrates the interest of the

opment to the West Avenue Play-field.

- (6) Block at George and Livingstone Streets on the North Side. It is proposed to acquire and improve this block much after the manner of the Adams Street Playground.
- (7) La Plume Island. At present this island is low and requires filling.



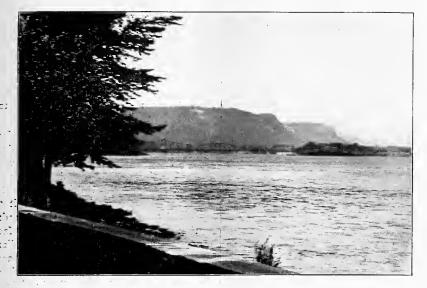
SITE OF THE PROPOSED COULEE PARK, LA CROSSE, WIS.

When filled and improved, it will make for the South End of the city a park much like Pettibone Park.

(8) Forty acres at the south end

successful and the results so satisfactory that it is worth while to note the lessons which the experience gives as a guide for the future not

only of La Crosse, but of the many other small cities in the United States which are now in a position not unlike that which confronted La to be done by them. The parks and playgrounds were put in exactly the same class as the public school and the public library and in renewing



MISSISSIPPI RIVER VIEW AT LA CROSSE, WIS.

Crosse two years ago.

The six points of most significance are:

(1) The main reliance from the beginning was upon public action and public support. The people were taken in on the ground floor, so to speak, and made to feel that the work was not only to be for them, but was

the appropration this year, the members of the city council showed that they looked upon them in this way.

(2) The park commission has, from the start, applied the efficient methods of private business to the administration of this new city department and with similar good results.

(3) Before a step was taken toward

execution, a complete general plan was prepared for all the parks and playgrounds included in the present system.

(4) The cost of these parks and playgrounds for La Crosse has not been heavy. The council has issued twenty-year bonds for seventy-five thousand dollars and the one mill tax has yielded a little over twenty thousand dollars a year for two years. Even under the present law and the extra expenses inevitable during a period of heavy construction the annual cost has not exceeded fifty cents per capita.

(5) Another conclusion justified by the experience of La Crosse, is the possibility, especially in the smaller places, of enlisting in the service of the community the most honorable and able men. If an unpaid commission is created, free from political influence, under conditions that permit of a large public service, it will always be possible, as at La Crosse, to find qualified men to accept.

(6) The final lesson of the La Crosse parks is their effect upon the civic spirit of the entire community. There has been a noticeable quickening of civic pride and an awakening of interest in civic affairs which is worth all that these public improvements have cost in money and personal work.

DUSTLESS ROAD-SURFACING AND ROAD BUILDING

Plant for Examining Road Materials.

Dust prevention and road preservation are almost inseparable subjects in the study of good roads so insistently demanding the attention of road engineers. Therefore, the bulletin of the United States Department of Agriculture for the Examination of Bituminous Road Materials, prepared by the Office of Public Roads, and issued as No. 38 of that series, which contains complete descriptions of the methods of examination for that class of materials, as employed at present by that office, should materially further the adoption of standard methods, a matter which is of the utmost importance at this time.

These methods are presented in such a form that any intelligent person may, with a little practice and the proper equipment, make such examination. With this object in view the bulletin describes the various tests in greater detail than would have been necessary for the use of

chemists, and illustrations are presented of practically all the apparatus required. Also a list of the necessary equipment for a small laboratory about to engage in the routine testing and inspection of bitumens is given. The maximum cost, exclusive of platinum wire, solvents and chemicals, would not exceed \$300, and probably could be purchased cheaper by securing bids on the entire equipment from several drug supply houses. For the extraction of bituminous aggregates, the recovery of the bitumen, and examination of the aggregates, an additional outlay of \$125 would be necessary, but this expense seems to be entirely within the means of most road commissioners, charged with the construction and maintenance of public roads.

It is to be regretted that no standard method for examining bituminous road materials have been generally adopted, as the necessity for such standards has become imperative. The

office of public roads has given considerable attention to this matter, both with respect to investigations conducted in its laboratories and through co-operation with certain technical societies interested in the testing of materials. While it is realized that the scheme of examination presented is by no means perfect, and may in the future be improved, it has nevertheless been of great service in classifying bituminous road materials and determining their suitability for use according to various methods of application and construction.

British Dust Problem Statistics.

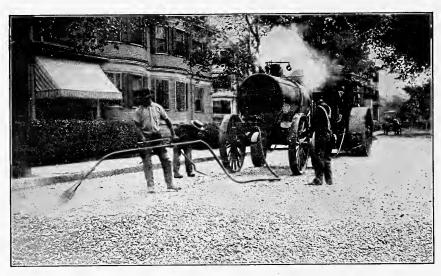
Consul General John L. Griffiths, of London, sends the state department a report of the work of the "Roads Improvement Association," which has made an investigation of the dust problem in the United Kingdom and the results have been published. The information was obtained

by circularizing the road authorities in different parts of the country. The consul summarizes the statistics collected as follows:

In regard to the preparation of the road for treatment with tar, 56 surveyors pointed out the necessity of thoroughly cleansing the road from dust by sweeping it first with machine brooms and afterwards with hand brooms. Other replies, while more general, indicate that the road should be in good condition.

giving the road a second treatment it was necessary to treat only the center of the highway, the sides remaining in fairly good shape. In some districts the treatments lasted two years.

A copy of the development and road improvement funds act of 1909 is on file in the Bureau of Manufactures, at Washington, as are the following publications of the Roads Improvement Association: "Highway



APPLYING TARVIA X TO MACADAM, BROOKLINE, MASS.

As to the kind of tar used and the price 134 authorities used crude or ordinary gas tar; 25 used distilled or refined tar; and 6 used oil-gas tar. The prices varied from 2 cents to 8 cents per gallon, the usual price between 4 and 5 cents. Twenty-nine authorities used specially prepared tarry materials, such as Tarvia, Tarmite, Clare's Patent, Tar Compo, and Dustabato. In 33 cases the area treated per gallon

In 33 cases the area treated per gallon of tar was between 3 and 5 square yards; in 99 cases it was between 5 and 7 yards; in 19 cases, between 7 and 9 yards; and in 5 cases more than 9 yards. When specially prepared tarry materials, oil-gas tar, or ordinary tar mixed with oil was used, the average spread to the gallon was greater than when crude or distilled tar was employed.

Asked as to what material was spread over after treatment, 77 authorities replied that they used sand; 37 used small (¼ inch) granite chippings and granite dust; 10 used large (over ¼ inch) granite chippings; 14 used limestone chippings or oust; 8 used slag chips or slag dust; 19 used road grit removed from the road befor treatment; and 15 used local materials, such as shingle, pea gravel, cinder dust, etc. In 5 cases no material was placed on the road after treatment. Several surveyors expressed the opinion that granite chippings are the best material.

As to the method of spreading the tar and the cost, in 84 cases hand spreading was used, while machine spreading was practiced in 49 cases.

The average cost for treating the road surface, including all expenses of preliminary sweeping, tar, sand, or other material spread after treatment, and labor, varied between 1.4 cents and 6 cents per square yard. The usual cost was 2 to 2½ cents when machine spread and 2½ to 3 cents when hand spread. Where two coats had been given the cost of the second coat was much lower than the first,

In 61 cases the treatment lasted a season, 6 to 9 months; in 54 cases, 12 months; in 5 cases, over 12 months; and in 5 cases loss than a season. In several cases when

Maintenance and Repair," "Official Test of the Dust-Laying Qualities of Calcium Chloride" (1909 and 1910), and "Dust-Problem Statistics." These will be loaned to interested parties.

Tar Macadam Roads in Scotland.

Consul J. N. McCunn, at Glasgow, reports that the roads laid with tar macadam several years ago in this part of Scotland have fulfilled all expectations as regards durability and cleanliness. It has been found that to convert an ordinary macadamized road into a tar-macadamized road it is not sufficient simply to cover the old macadamized surface with the tarred metal. The surface must first be "scarified." When the whole of the original surface has been so "scarified," the tarred metal is laid upon it and rolled in. If the surface is not scarified, but the tarred metal simply laid down upon the old surface of an uneven macadamized road, the finished road soon begins to show unevenness of surface, and finally it is apt to break up at various points where traffic is heavy.

It has been found by experience that granolithic or cement foot pavements are more satisfactory than foot pavements made by the Walker system of tar macadam, although the tarmacadam pavement is more agreeable to walk upon.

The Three Ways of Using Tarvia.

In this country the office of public roads in the Department of Agriculture took the lead with certain important experiments at Jackson, Tenn. The experiments were widely studied, imitated and developed, until now it is considered that limitations and difficulties are well understood among up-to-date engineers. In fact, the study of engineers is now directed toward the refining of the details of handling and application of the tar binders at minimum costs.

An old road with its interstices packed tight and hard with dust would absorb some compounds very little, while a new road of a more open texture would drink up the bitumen greedily and even allow it to percolate down toward the foundation and away from the surface where it was needed. A standardization of the bitumen products became necessary and as chemical analysis of these materials is exceedingly difficult and elaborate, the manufacturers of Tarvia standardized them according to factory processes and gave them the permanent trade-mark names-"Tarvia A," "Tarvia B" and "Tarvia

The division into three grades was according to consistency. Tarvia A is a refined tar of medium consistency, being very viscid when cold and liquifying readily at the application of heat. Tarvia B is a fluid, requiring no heat to prepare it for application, while Tarvia X goes to the other extreme, being solid when cold and very viscid and dense when hot.

On old, well-worn and tightly packed roads, Tarvia B is used, the process simply requires the sweeping of the surface and the spraying of Tarvia B evenly over the road from a sprinkling cart. The Tarvia B sinks into the road and hardens, not however, becoming brittle, but retaining its viscosity for a year or more. The attractive feature of this process is its low cost and simplicity.

The second problem is that of the better grade of roads which require the maintenance of a smooth and handsome surface, as in parks, cemeteries, boulevards and suburban streets. For this work Tarvia A is employed. The road is swept, the Tarvia A is applied hot—it percolates into the macadam and then the top coating of fine screenings is spread and rolled, thus restoring the even contour of the road and correcting all

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WHO GETS TRADE PRICES on NURSERY STOCK?

An Address before the National Association of Nurserymen, by Thomas B. Meehan

First, let us try to decide what constitutes a "trade rate." Is it the trade catalogue prices which nurserymen publish, or is it the inside price which nearly every nurseryman is ready and willing to quote by letter to the trade in general, or perchance to a few selected nurserymen who favor him with regular orders or, as in some instances, worry him with the belief that his prices are high and that all other nurserymen are selling lower than he.

Or, let us take the so-called "trade catalogue." Asterbilts trade catalogue quotes Norway maples at 1½ to 2-inch caliper at \$1.50 each. The Standard Nursery Co., same size at \$1.25 each. Grabem & Co., the Holdfast Nursery, I. Gottem & Sons each offer same grade of tree at anywhere from 75 to 85 cents each. Now which of all of these prices is the trade price?

Examine the trade prices on evergreens. You will find that two or three feet Norway spruce are offered all the way from 15 cents to 50 cents, and American Arbor Vitae same size at anywhere from 10 cents to 40 cents.

This past spring 1 was offered Spirea Anthony Waterer, 18 to 24 inches, at the following prices, 6, 7, 8, 9 and 10 cents, all by responsible nurserymen. Now which of these prices is the trade price?

You may say that these prices on Spiraea Anthony Waterer were special prices made according to the quantity of stock each bidder had to offer and those who quoted the lowest prices did so because they or he had a surplus to unload. Grant this to be the fact—then take the following prices taken direct from trade catalogues and tell me which of these prices is the correct trade price, 6, 7, 8, 10 cents.

Now take the trade catalogue of a nurseryman whose business is largely with parks, cemeteries and landscape gardeners, and his so-called trade rates average ten to twenty per cent higher than the prices of the nurseryman who sells regularly to the trade. Does he not occupy a field of his own and does he do any harm to his fellow nurseryman by selling to his customers at such prices? True, there may be some nurserymen whose trade prices are still higher, but in

that case, can you consider those prices trade prices, when the majority of the nurserymen are offering the same stock at lower rates?

But you may say that this nurseryman should sell his stock to his brother nurseryman at a less price than he is selling to the park, cemetery and landscape gardeners. If he can sell his stock at the trade price he is getting, why should he lose money by selling any part of that stock at a reduced price? If nurserymen buy from him at his trade prices, it is because they want his particular stock, they know it is better than the average run of stock or because they cannot get it elsewhere.

I was told by a certain nurseryman, a prominent member of this association and a good fellow at that, that a nurseryman had no business to sell to the trade if he could not give him, a lower price than he gave to the park, cemetery and landscape trade, even though his trade prices were ten to twenty per cent higher in the average than the regular so-called trade price. Is that right?

This past spring a certain city in the west required a carload of trees. An eastern nurseryman was given the opportunity to figure on the lot. His catalogue price was \$1.00 each. The same grade of trees was being offered in the west, near the same place the trees were to be delivered, at 50, 60 and 70 cents each. This eastern nurseryman, having a large supply of the trees, and knowing if he got the order, it was like carrying coals to New Castle, offered to deliver the carload at his catalogue price of about 92 cents each. He got the order, but has not yet been forgiven by certain dealers in the immediate vicinity of the point of delivery, because they say he had cut prices. Yet his average price of 92 cents each was fifty to seventy-five per cent higher than the average trade price of other nurserymen.

But I may have drifted from the point at issue. If you are prepared to fix the average trade price of Hydrangea P. G., 2 to 3 feet, at seven cents each and that is the lowest trade price at which all nurserymen will sell the stock, then I would say unquestionably a nurseryman should not sell the plant to parks, cemeteries and landscape gardeners at seven

cents each; his price should be at least 20 to 25 per cent higher. Or, if the average price of Norway maples of a certain grade is \$1.00, then the price to the park, cemetery and landscape gardener trade should be no less than \$1.25 each, but until some standard price on every item of ornamental stock is fixed and adhered to by all nurserymen alike, east and west, north and south, I fail to see how this question of what is a trade price can be overcome.

In no other trade does this condition of affairs exist. You cannot buy iron pipe, hardware, spades or other tools direct from the manufacturers at what we call trade prices. He may perhaps sell his goods direct to you at a list price and perhaps give you 10, 20 or 30 per cent discount, but when the jobber goes to him for a price, he will get an extra 10 or 20 per cent off, that you cannot get. The jobber is protected.

But conditions are somewhat different between the manufacturer and the nurseryman. The manufacturer knows exactly, to the fraction of a cent, just what his goods cost him to produce and fixes his selling price based on the cost of production, but where is the nurseryman who can say "My 2 to 3 feet Hydrangea P. G. cost me exactly four, five or six cents to grow," and can prove it.

A nurseryman once said to me, "I keep figures which show me exactly what my stock cost me to grow," and he showed me an elaborate system of figures. I took several items and asked him if he did not think certain items of his expense on that item were greatly in excess of what they actually should be. He assured me they were not and that his figures were taken from the correct records kept during the actual process of the work. I took his figures and proved to his satisfaction by his own figures that his men would have to stand with spade poised in the air for half a minute between each spade full of earth to enable them to put in the time his cost sheets required.

From what I have said it may appear to you, gentlemen, that I am in sympathy with the idea of selling nursery stock to parks, cemeteries and landscape engineers at trade prices. I have had occasion in the past to

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PARK NEWS.

Shepardson Park, a new public playground, was opened to the people last month. It was a gift of the Hon. J. B. Shepardson, and is ten acres in extent.

The town of West Boylston, Mass., is to have a park opposite the high school building, the result of a bequest in the will of Aaron Goodale, subject to certain stipulations. The bequest for the park is about 3½ acres at the intersection of Crescent and Goodale streets.

Anna Williams by will has left seven acres of land on the south side of Pearl street, Batavia, N. Y., for a village park, provided the village will accept it and properly provide for its maintenance.

Benton Harbor, Mich., has recently bought five acres of land adjoining the Hall property donated to the city a few years ago. This will give a ten acre park,

All difficulties in the way of establishing the proposed Ryan Parks in Mobile, Ala., have been removed and work on clearing the site is under way.

Plans for improving the grounds of the Citizens' cemetery and the old potters' field on Harrison avenue, Chattanooga, Tenn., are now being worked out by Commissioner J. H. Warner, of the department of public utilities and buildings, with an idea of making a beauty spot out of the present disorder of weeds, overturned tombs and dilapidated fences.

Crawford, N. J., on the Rahway river, is to have another park.

Rather than use the remainder of the \$1,000,000 park loan for the development of a water-front park, Baltimore, Md., the Park Board has practically decided to establish a neighborhood park in the section between City Springs Park and Patterson Park.

The Irving Park district, Chicago, Ill., organized a year ago, comes into possession of approximately eight acres of land, located within the environs of Irving Park. This will form the beginning of a park system of which Irving Park is the hub. The land cost approximately \$50,000 and the balance of a bond issue of \$150,000 will be used in improving it as a park.

The Sherman, Texas city council has

appropriated \$1,000 for the ladies of the Sherman Civic Improvement League, to be used in improving the various parks of the city. Two plots of ground recently donated to the ladies for park purposes will be cleared and put in shape immediately.

The initial work of preparing plans for a "city beautiful," for South Bend, Ind., has been inaugurated by R. P. Barnett, acting for George E. Kessler, landscape architect, who has been employed by the park board to prepare a systematic plan.

In pursuance of an adopted policy to extend the park system of Houston, Texas, city officials have closed a deal for the acquisition of 19.26 acres of land near Highland Park, known as the old Lawrence place.

Urging both the preservation of present roads and trails in the Mount Tacoma national reserve and the extension of new ones, the committee appointed by the trustees of the Commercial Club and Chamber of Commerce of Tacoma, Wash., to investigate park conditions has made its report.

By the will of Miss Anna Williams her home property in Batavia, N. Y., has been bequeathed to that village for park purposes and it is to be named Williams Park. Subject to life estates \$23,000 is also bequeathed for the care and improvement of the park.

Capt. Charles Welhausen has donated \$3,500 to Shriner, Texas, for a public park and \$1,250 has been raised for improvements and maintenance.

The various legal formalities in connection with the establishment of the Vail Memorial Park, Whippany, N. J., have been complied with and construction work is being pushed. Mr. Theodore Vail, chairman of the board of the New York Telephone Company, has acquired 120 acres of land adjoining the historic cemetery of the Presbyterian church at Parsippany, where a number of his family are buried. The beautifying of the cemetery and church grounds was his original purpose, but the project has grown until now it includes the construction of a memorial park that will be a notable beauty spot.

The authorities of Portland, Ore., are arranging to acquire several pieces of property about the city for the purpose of establishing small parks.

A new era in national park progress is expected to result from Secretary Fisher's attitude on the question. He is quoted as holding that the national parks, under the present system of administration, present the worst example of uneconomic operation, and he would conserve park administrative affairs by the creation of an able bureau. Another decisive stroke suggested by Mr. Fisher is his avowed intention of placing the forestry division under the jurisdiction of the interior department. Better administration of forestry matters is the reason he gives for this proposed change.

George M. Miller, a member of the school board of Racine, Wis., has suggested to the common council not to accept plats for new additions to the city without the real estate owners agreeing to donate a block of the property for free parks or school purposes. A good suggestion.

The voters of Menominee, Mich., rejected the proposition to bond in the sum of \$9,000 to purchase additional land for the John Henes park in a very decided way. The total vote against the proposition was 491, while 53 voted for bonding. The people think the park is large enough for the present; but how about the future?

The Alton, Ill., city council has granted a long-withheld permission to the Alton Parks Commission to buy a tract on the bluffs at Alton as a bluff park site. All other public places on the bluffs have been shut off, and the view of the river was practically forbidden except through the courtesy of private individuals.

Elmira Heights, Elmira, N. Y., has voted to purchase the Oak Ridge Hotel property, corner of 14th street and Elmwood avenue, for a public park.

The citizens of Chicago are to be called upon to vote for a bond issue of \$1,000,000 for the purchase of new park areas for the West Chicago Park district.

At a recent meeting of the Commission Charter Freeholders, of Sacramento, Cal., a minimum tax rate of 10 cents per \$100 valuation was adopted, in order to provide sufficient funds for the upkeep and improvement of the parks.

It has been suggested by a member of the park commission of Los Angeles, Cal., that the Illinois Lincoln memorial fountain, to be erected in Eastlake Park, should be designed after the Saint Gaudens Lincoln monument in Chicago.

The question of acquiring the 268 acres of ocean frontage and upland at Rockaway, Long Island, N. Y., at a cost

of \$1,250,000, for a city-owned seaside park, has been reported on favorably. This project has met with favor from recreation associations, civic and other bodies, who have urged that the city buy the ocean frontage for a great seaside park, and for the site of a large sanitarium for children suffering from bone tuberculosis. The project to establish a great public park along the Queen's shore of Hell Gate is also revived This plan was laid out in 1904. The proposed site embraces fiftyeight acres facing Hell Gate opposite Ninety-ninth street, Manhattan, and extending 3,000 ft. along the Astoria shore.

Springfield, Ohio, has just dedicated a memorial arch to John and David L. Snyder, who gave the beautiful Snyder park to that city in 1898. It comprises 225 acres, and was at one time used by the city as a dumping ground. In 1898 John and David Snyder offered the tract to the city on condition that \$20,-000 should be expended upon its improvement in two years. When the city had spent \$15,000 on the work, the brothers turned over the deeds to the city and also gave \$225,000 in 4 per cent bonds, the interest of which was forever to be used in maintenance. In other gifts also these two bachelor philanthropists aided the park and the city.

It is rumored that J. P. Morgan has practically arranged to turn over his estate known as Craigston, just south of Highland Falls, N. Y., to the Palisade Park Commission to be added to the land now held by it under cession to the state. Craigston is a magnificent park and its acquisition by the commission would be a valuable one.

According to the estimate filed with city comptroller the city commission of Superior, Wis., will require \$14,-000 to carry on its work next year. This is \$300 more than last year when the park commissioners were given \$13,700.

Under the direction of the board of park commissioners the superintendent of city parks and an engineer from the city engineering department of Salt Lake City, Utah, are devising and planning a general system of parks and boulevards for the city. When completed, this system will form the basis of all work to be done in the future.

NEW PARKS

The two pieces of ground lying in White township, adjoining Beaver Falls, Pa., options on which were secured by the Chamber of Commerce last spring for park purposes, are now in the hands of trustees, to be held until they can

be satisfactorily turned over to the borough for the free use of the people of this locality. The property consists of about eight acres lying along the macadam road and is 20 minutes' walk from the postoffice.

Supplementing the plans of the Essex County, N. J., Park Commission, which are not pleasing to Nutley, the town council of that place has decided to acquire land to permit the construction of a parkway from Chestnut street to the Passaic County line along Third river.

The purchase of Mildred Park, Springfield, Ill., has been completed, and improvements will be started at once. The driveways are to be covered with white rock instead of red shale, as in the other parks.

The new City Park on Rock Creek, Independence, Kan., has been cleared up and was opened by an Old Settlers' reunion last month.

The Linwood Development Company, of Oklahoma City, Okla., has deeded a half block of ground in Linwood addition to the city for park purposes.

A new park was dedicated in the south part of Minneapolis, Kan., last month.

Park Superintendent Vinnedge, of Fort Worth, Tex., is arranging plans for a park on the site of a new substation of the Stone & Webster corporation on Calhoun street between Front and Seventeenth streets.

The Park Board of Omaha, Nebr., has recently approved the findings of the report of an investigating committee recommending the purchase of a park site and ordered the same filed for final action. The site under consideration is known as the Cassidy tract and lies in the center of a district thickly populated by workingmen.

A new 60-acre park is a project now under way in Battle Creek, Mich., which will in a large way be a gift of private citizens, as the city will be called upon to pay but a small proportion of its cost. It will have playgrounds, gymnasiums, wading and swimming pools, and will be a combined people's pleasure and recreation park.

After years of effort Deadwood, S. D., is to have a city park, the council having recently authorized the purchase of property for the purpose.

At the recent "Budget Exhibit" in New York, Park Commissioner Kennedy, of Brooklyn, showed a remarkable photographic object lesson on the Brooklyn parks. Including Prospect Park, bridge approaches, and the various playgrounds, the commissioner has some 1,100 acres to care for besides some miles of parkways and streets.

The commissioner's motto is "improve—not acquire" and a very large amount of improvement work is under way and laid out.

PARK IMPROVEMENTS

The contract to construct the park about the Pan-American building, Seventeenth street and Potomac park, Washington, D. C., has been awarded. The cost is not to exceed the \$100,000 donated by Andrew Carnegie at the Peace meeting last February. The improvements will consist of sunken gardens, fountains, steps, and a marble wall, about 4 ft. high, running around the entire length of the grounds.

The plans for the work were prepared by the architectural firm of Kelsey & Cret, of Philadelphia. In speaking of the new improvements, Director Barrett, in a pamphlet which he recently issued, says: "The grounds are to be inclosed, but a spacious formal court in front will give an inviting air of freedom and openness, so that not until one penetrates the rear will one fall under the spell of absolute detachment. The garden house at the extreme rear will shut out a distracting view of the new factories that have already crept into an otherwise favored neighborhood. It will become an out-of-door apartment, with a homelike appearance and air, not that of a public meeting house." The main entrance will be a massive gateway of marble, and another gate will be located at the northeast corner of the grounds. On either side of the building two large sunken gardens will be laid out, while in the rear a fountain, incased in a large court, will play upon statues representing South American industry and art.

The park board of Buffalo, N. Y., has awarded the contract for building a casino in Cazenovia Park, to Austin Summers at his bid of \$23,000. The building will be located on the Cazenovia Park lake and will serve a purpose similar to the Delaware Park casino. Another contract will be for the proposed greenhouse in Delaware Park, near the Art Gallery, to cost about \$20,000. Other improvements planned have to do with the proposed new zoo in Delaware Park. Bids will soon be asked for an elephant house, part of the \$100,000 construction work contemplated.

The board of park commissioners of Fargo, N. D., is planning to greatly improve the two pretty parks of the city. It has employed the services of C. L. Mellor as park superintendent, the year round. Before the cold weather sets in he proposes to have the parks cleaned up and put in shape.

Extensive improvements are being made in Winchester Square, Springfield, Mass., which will make it much more attractive. New paving has been laid and the fountain removed to the center of the square. Unsightly and inappropriate trees have also been set out.

Contracts have been awarded to the Ransome-Crummey Company for the construction of two tennis courts in Mosswood Park, Oakland, Cal. A contract to the Oakland Paving Company for sidewalking the north side of Twelfth street at the dam has also been awarded. The park commission has authorized the preparation of plans and specifications for an aviary and a bearpit for Mosswood Park, as pheasants and other birds have been promised by the Fish and Game Commission.

The work of reconstructing and improving San Pedro Park, San Pedro, Cal., has ben begun under direction of Laurie D. Cox. It was the original intention of the park commission to spend only \$3,500 on this work, but the necessity for a substantial improvement at the harbor end of the city and the great natural possibilities of the San Pedro Park led the commissioners to double the amount. The park consists of a narrow strip extending nearly 1,800 ft. along the edge of the bluff.

Half a million dollars is to be expended in improving the District of Columbia parkways during the fiscal year of 1913, if Congress approves. Four big projects are contemplated. The construction of a highway from Lovers' Lane to Rock Creek Park, the extension of Piney Branch parkway, the acquisition of Mount Hamilton, opposite Mount Olivet Cemetery, as a park, and the widening of the road between Fort Davis and Fort Dupont.

For a small town, Virginia, Minn., is very active in park work, and expects to have an appropriation of \$25,000 for the maintenance of the city parks next year. It is hoped to be able to use \$5,000 in South Park, a tract of 17 acres, bought this year, and the planting of city trees and care of those already planted will use up \$2,500. This year the park board had about \$43,000 at its disposal for the development of the park system. Much more work is to be undertaken on improvement lines.

The work of cleaning up and improving Bayliss Park, Council Bluffs, Ia., has been begun in earnest, a job much needed since the carnival. A large area of low ground is to be filled.

The superintendent of Fairmont Park, Pueblo, Colo., the only suburban park of the city reached by street car service, recommends that a large

portion of its area be turned into a wild flower garden, including the introduction of a plantation of native evergreens. Several improvements are also proposed.

Hermann Park, Cincinnati, O., which surrounds the new waterworks at California avenue, will be further improved. The city council has voted to spend \$6,000 on the work.

The park commission of Los Angeles, Cal., has approved plans for a lath house for plants at Exposition park. Usually lath houses where tender young growths are nurtured are eyesores, but this one will be an exception and will cost about \$4,000. The house will have three compartments, and at one end of it will be a tall lath tower. The structure will be 150 feet in length and will be the largest building of its kind in California. It was designed by Engineer Cox of the park commission.

Action has been taken to secure a forty-acre addition to Eastlake Park, Los Angeles, Cal.

So great has been the popularity of Riverside Park at the northwestern corner of Buffalo, N. Y., that many improvement features are being considered by the Park Commission.

Cottages are to be erected in Sycamore and Trinity Parks, Fort Worth, Texas, for custodian's residences. According to the report of Mr. Vinnedge, park superintendent, \$99.298.38 has been expended on the park system during the past two years.

The Park Board of Duluth, Minn., has apportioned \$56,251 for expenditures on the parks and playgrounds of the city.

The State House Commission of Trenton, N. J., has adopted what are known as the Olmsted plans for establishing a public park along the Delaware River in the rear of the State house and adjacent property. The plans provide for a sea wall twelve feet in height and extending a considerable distance into the river. Morrisville, Pa., on the opposite bank of the river, may oppose the plan.

Wichita, Kas., has received a donation of a strip of land to enlarge North Riverside Park along the bank of the Little Arkansas river.

The City Council of Cincinnati, O., has passed the following ordinances authorizing the board of park commissioners to make contracts for the construction of a comfort station and wading pool at Young and Ringgold streets, to cost \$10,000; for grading park property at Burnet avenue and

Reading road, to cost \$8,000; for grading at Woodward park, to cost \$2,200; for the purchase of 114 acres of land known as the Blachly farm, for park purposes, at \$82,000; for the purchase of certain real estate at Western and McLean avenues, Bank and Division streets, for playground purposes, at \$3,800; for the purchase of real estate adjoining Vine and Hollister Street park, for park purposes at \$3,150. An ordinance was also passed to appropriate property south of Des Moines street, adjoining the Hunt athletic park, for park purposes.

A new elephant house is to be constructed at the Zoo in Buffalo, N. Y.

The sum of \$1,500,000 is at present available for the beginning of the work of constructing the new Convention Hall in Fairmount Park, Philadelphia, but between \$3,000,000 and \$4,000,000 will be required to complete the job. The structure, which will have a seating capacity of 20,000, must be finished within ten months.

A pavilion, to cost some \$12,000, has been provided by the Park Board of Peoria, Ill., for South Park.

Plans for the improvement of Eden park, Cincinnati, O., particularly with reference to a new band stand and amphitheater, have been outlined by Mr. Geo. E. Kessler, landscape architect.

PARK REPORTS

The Board of Park and Cemetery Commissioners of the City of Saginaw, Mich., has recently issued its report for the years, 1908, 1909 and 1910. Saginaw now possesses 14 parks ranging in area from a fraction of an acre to 136 acres, in all an acreage of 219.6. Among the larger parks are: Hoyt Park, 27 acres; Ezra Rust Park, 136.5 acres; Bliss Park, 13.3 acres, and Linton Park, 20 acres. Ezra Rust Park was named after a well-known philanthropic citizen, who contributed the land and \$50,000, onehalf the cost of improving the property. Saginaw has been the recipient of much of her park and improvement properties from interested citizens. The report of Mr. Daniel H. Ellis, superintendent of the parks and cemeteries, is a history of the work so far done in improving the public grounds, and there is yet much to be done, for the system is young. Saginaw has three public cemeteries also under the control of the Board of Park and Cemetery Commissioners, Brady Hill, Forest Lawn and Oakwood.



PLANTING AND CARE OF STREET TREES

An Address Before the American Association of Park Superintendents by J. J. Levison, B. A., M. F., Forester in the Parks of Brooklyn and Queens

The park superintendent of to-day is facing a new problem. Those old neglected street trees are now gradually becoming his care and the people are even more particular about them than they are about the parks, because in the street tree the citizen taks a proprietary interest. It is his tree; he sees it daily, is directly benefitted by it and expects it to be thrifty and sightly. The park superintendent must meet this problem and if he meets it well it is that much to his credit. What then are the fundamental principles of street tree planting and care and how shall he go about the problem?

Street trees as well as the park trees should be controlled by the municipality and placed under the jurisdiction of a single head. Municipal control is the only way of securing uniformity in planting-very essental on streets-it is the only way of controlling insect and fungus invasions over large areas and of doing anything systematically and at the right time. Co-ordination of effort, that is, combining all city tree work into one bureau, is also the only way of insuring the absolute eradication of insect and fungus pests, of securing uniformity and efficiency in methods, material and apparatus and of getting the work done at the least possible cost. All city tree problems both in the parks and on the streets are interdependent and divided effort would mean loss of time, money and trees.

With the work co-ordinated, place the responsibility of all tree matters on a professional forester, a man trained in the science of forestry and arboriculture and one of considerable experience in park work. His duties will be to see to all planting, spraying, pruning and cultivating. He will establish a municipal nursery, test the various insecticides and fungicides, install the best apparatus and enforce the city tree ordinances. He will organize the office work, plot the street

trees on a map and advise citizens on their tree problems. He will issue permits for tree removals and private tree pruning, study the local tree problems, collect tree statistics and promote public interest through lectures and writing.

The enactment of a good city tree ordinance is the next step. There are a number of cities that now have such ordinances in force and the new one may be modeled from those. Your tools to work with are thus provided and if your trained expert is a good one, you can leave the details of carrying out the work to him. Oversee his work occasionally, give him the benefit of your wider experience and back him when necessary, because in the beginning of all such work there frequently appear many cases of opposition from citizens who either for selfish motives or otherwise try to force their own views in the matter of handling technical tree problems.

The attention of the forester will first probably be directed to the care of the existing trees rather than to the addition of new ones.

Spraying for leaf-eating insects may be his first work. Street trees, growing under less favorable conditions than park trees, are naturally weaker and more susceptible to insect attack. Street elms without care very seldom escape attack from the elm leaf beetle and such trees as the horse chestnut and linden are titbits for leaf eating caterpillars. Let all such spraying be done early while the insect is young and susceptible to the poison. It is also important to look into the chemical and physical value of the insecticide you are using.

A few years ago I found one of the best known brands of arsenate of lead to contain as little as 4 per cent of arsenic oxide, whereas it should have been 15 per cent or more to be the least effective. Since then, we have been purchasing our spraying ma-

terial subject to chemical and physical tests and have been paying considerably less than what we have been paying before.

Sucess in spraying will moreover depend not only on the value of the insecticides and upon how early in its feeding stage the insect is attacked, but also on the thoroughness with which the work is done. The kind of apparatus used will also make an appreciable difference, for a barrel pump is too slow for the amount of labor invested to operate it and a very heavy wooden tank such as is commonly used for woodland spraying would prove too sluggish and cumbersome in going about the city streets.

In late summer and early fall, pruning will be in season. The men should then be trained in the fundamental principles of the work and furnished with printed hints on the necessary precautions in climbing trees and removing branches. We have had little booklets published on such topics for our men and find them very helpful. Close cuts and application of coal tar to the wounds should always be insisted upon and above everything else, do not let them prune more than is necessary. The tendency on street trees has generally been the other way to the great detriment of the trees.

Cavities caused by some old neglected horsebitten wound or by an improperly made cut, are more common in street trees than in park trees and the present tendency is to indiscriminately fill them all with cement. This work is expensive and in many cases unjustified. It is particularly true of trees on the street, because there, the trees are frequently of poor species and the cavities so neglected that the absolute elimination of diseased wood is utterly impossible. There the decay would keep on developing after treatment with the same rapidity as before treatment. Cavity filling is justified only where the tree is a much valued specimen, where the filling can serve the practical purpose of eliminating moisture and where every trace of diseased wood can be thoroughly removed before the filling is inserted. In many cases the proper use of the chisel or gouge alone without the filling will eliminate all disease and leave the wound in a position where moisture will not collect. The absolute eradication of all infested wood from a neglected cavity is often impossible, and in many cases where this is true, the axe is by far the safest and most practicable tool. Street trees especially should be cut down as soon as they become hollow or badly infested with disease. For as soon as the citizen notifies the authorities of the condition of his tree, all responsibility is shifted on the city and lawsuits are sure to follow in case of any subsequent damage.

Spring is the time for planting, but the preparation for planting should be commenced in the fall. Fall is the time to purchase trees and leave them standing labelled in the nursery for spring delivery. Holes in the sidewalk about five feet long, three feet wide and three feet deep may be opened in the fall and ashes, tin cans and beer bottles frequently composing a street soil may be changed for a cubic yard of rich black loam.

In selecting the trees for street planting consideration should be given not only to the species but to the specimen as well. The specimen tree should be about 21/2 inches in diameter, should possess a straight trunk, a definite leader and a symmetrical crown, commencing at seven to nine feet from the ground. It is sometimes difficult to find trees that will in every respect meet these specifications and it might then be well to agree to a smaller diameter, but to msist on well formed specimens. Individual perfection, symmetry and uniformity are fundamental principles in successful street planting. For this reason it is important to plant trees on the same street or at least on a stretch of several blocks, to have all trees of uniform size and to set them out at equal distance apart. Thirty feet apart is a suitable distance for most street trees and a tree like the elm should be allowed sixty feet. It is in the realization of just such points wherein lie the advantages in havng a municipality undertake such work. If left to the citizens to do this individually, the trees will be planted either too close or too far

apart. Many species will be mixed on the same block and many blocks will have no trees at all.

As to the selection of the species, that will of course vary with the local conditions. In a general way, however, persons in the east will find the Oriental Sycamore the hardiest of all for street planting. The sycamore has lately been slightly afflicted with a leaf blight (gloeosporeum nevisequum), but the disease has not become general enough to do serious damage. The Norway Maple is another tree equally desirable. The oaks though of slower growth at first, are by far the noblest and most longlived trees. The red, pin and scarlet oaks are the three best species for street purposes. The red oak is the fastest growing and least fastidious in its soil and moisture requirements. The pin oak is the most beautiful when its low pendulous branches are disturbed as little as possible and when its roots can get plenty of moisture. The tree is therefore best adapted for suburban sections. The scarlet oak is worth the trial for its persistent and brilliant foilage. The Ginkgo has demonstrated its adaptability to poor soils, to unfavorable city conditions, and its resistance of insects and disease. It should be tried to a greater extent for street planting than it generally is. The English Elm is another tree doing well in many large cities.

There are a number of trees that are planted for their admirable qualities of either form, color or beauty of their flowers, but requiring special favorable conditions and care, should be chosen with a greater degree of hesitance than the above, and planted preferably in suburban sections rather than in the heart of the city. The principal of these are the sugar and red maple, European linden, horsechestnut, American elm, and tulip tree.

The Sugar maple has a symmetrical form and combines many shades of color in the fall, but requires plenty of moisture. In the vicinity of New York City, the trees of this species planted in the heart of the city are rapidly dying off and there is no other cause attributable for this condition except the excessive evaporation from the leaves against the meager quantity of moisture taken in by the roots from the impoverished street soil.

The red maple and the linden are both moisture loving trees and the latter is a favorable food for insect pests. The European linden is the better tree

for street planting. The American linden grows very straggly in the vicinity of New York though it seems to do better further south. The horsechestnut prefers a rich soil and is subject to a fungus disease, which discolors its leaves, causing them to drop in midsummer. It is also a common victim of "slime flux," a disease that causes the flow of sap from crevices in the trunk. The tree is used extensively abroad for street planting but for reasons just stated, should be used more sparingly in this country. The elm has the noblest form of all our shade trees but should only be planted on wide avenues, in suburban sections where it can find a deep, rich, moist soil and plenty of unvitiated air. The tulip tree compares favorably with other species in form and attractiveness but it is so exacting in its soil and moisture requirements that only young specimens should be used and its planting restricted to suburban sections.

The objectionable trees for street planting are all the poplars, the silver and sycamore maples, the catalpa, and male ailanthus. The poplars are very short-lived trees. They are dangerous in wind storms and grow so fast as to require constant cutting back. At a certain age their roots upset the sidewalk and their fine rootlets clog the neighboring water and sewer pipes. Their leaves drop very early in the fall and if the species is of the pistilate kind, the catkins falling on the sidewalk become a danger and a nuisance to pedestrians. The silver maples are constantly full of dead wood, are subject to boring incests in the vicinity of New York, though in other places it has escaped these pests. The variety of ailanthus tree that bears the male or staminate flowers generates a strong, rather oppressive odor, but if the pistilate form is chosen, the tree will produce a beautiful head and grow in places where no other tree will grow.

Such are the principal problems of those charged with the care of street trees. I have not attempted to dilate on the details of the work because they are too numerous and because, as in everything else, their solution will often depend more upon the judgment of the forester in charge and upon the local conditions than upon any rules that may be laid down. But whatever the problems, do not let us forget that they can always best be solved by one equipped with technical knowledge and experience and that the street trees are worth the effort since they are always valued by the citizen and ultimately lead to a better appreciation of the parks them-

ASKED and ANSWERED

An exchange of experience on practical matters by our readers. You are invited to contribute questions and answers to this department.

When to Trim Hydrangeas.

Editor Park and Cemetery: In your July issue I notice question of "H. H. Pa.": "When would you trim hydrangeas, spring of year or fall?" answered correctly by Bellett Lawson, The "rule" laid down by Mr. Lawson, however, is wrong and mis-Shrubs blooming on the leading. young wood, or one season's growth, should be pruned in winter or early spring before awakening of plant life, while shrubs growing on the old or last season's wood should be pruned immediately after they are through blooming. This will give the shrubs a chance to grow good, strong, flowering wood for their proper season. Nothing is gained by fall pruning, in fact little fall pruning is done by a practical gardener.

THEODORE WIRTH. Supt. of Pks., Minneapolis.

Preventing Freezing of Fountains and Small Ponds

Fountains and small ponds containing fish and water lilies may be kept from freezing through by the following simple device: Stones are piled in several places up to the water level as supports for the ice, and the water is allowed to freeze until the ice crust is thick enough to be upheld by the supports. Then the water below is drawn off sufficiently to leave a space of two inches between water and ice crust, and a small hole is broken into the ice to admit air to the fish. The water will not freeze any further now, as it is protected by the ice together with the layer of air between the two.-Die Gartenwelt.

Grass Seed for Marsh Land.

What is the best lawn seed mixture to plant on reclaimed marsh land, the land being properly worked up and fertilized.—W. B. H., R. I.

As to what is the best grass to sow on reclaimed marsh land, for the construction of a lawn, I would say that if the land is drained—you claim that it has been fertilized—the best mixture, in my opinion, would be Kentucky blue grass, red top, and sheep fescue. A dressing of lime you will find very beneficial, in that it will help to decompose the peat.

J. A. Pettigrew. Supt. of Parks, Boston.

Schools of Landscape Gardening.

Are there any schools where a young man may take a course of about two or three years in "Landscape Gardening"; that is, after he has finished a college course?—R. J. P., Ia.

This subject was considered in detail in PARK AND CEMETERY for October, 1909, and the leading colleges that offered courses in landscape gardening were mentioned and the courses described. Any of these would doubtless furnish work to occupy two or three years even for one who has completed the regular college course. The schools mentioned in that article were Harvard University; Cornell University, Ithaca, N. Y.; University of Illinois, Urbana, Ill.; University of Michigan, Ann Arbor, Mich.; Ohio State University, Columbus, O.; University of California, Berkeley, Cal.; Lowthorpe School, Groton, Mass.; the Missouri Botanical Garden, St. Louis, Mo.; and Columbia University, New York City. The University of Iowa, we believe, also maintains courses in landscape gardening in connection with its college of agriculture. Prospectuses and other information as to the course of study in any of these institutions of course may be had for the asking by any one interested.

Automobiles in Cemeteries.

The question of admitting automobiles within cemetery grounds is continually bobbing up with us and also with others. We prohibit them, but a pressure is being brought to bear to change the rule, and the question arises what is the custom in other cemeteries? If you have any information in regard to it and will kindly give it to us through PARK AND CEMETERY I am sure it will be appreciated by many managers as well as—G. W. K., Ind.

The growing popularity of the autofuneral cars in the larger cities calls to mind several inquiries concerning the admission of automobiles to cemeteries, and makes the question one of some importance. The majority of cemeteries represented at the convention at Philadelphia admitted automobiles with certain restrictions. In at least nine cemeteries represented automobiles were positively prohibited, in one or two instances as the result of accidents. They have, of course, come to stay, but users should be compelled to comply strictly with the laws governing their use in cemeteries as well as elsewhere. Large city cemeteries almost universally admit them. The chief reason for barring them would seem to be the size of the cemetery, the smallness of its roads, or insufficient policing.

The following is a copy of the rules recently adopted at Woodlawn Cemetery, Detroit, Mich.:

Owing to a number of accidents and in order to provide for the safety and comfort of visitors in carriages and on foot, the Directors of Woodlawn Cemetery Association request your co-operation in carrying out the following regulations:

Automobiles must not be driven at a greater speed than 8 miles per hour within the cemetery.

Automobiles or other vehicles must not be turned upon an avenue, but will be required to drive around a section. Fast or reckless driving will not be allowed

reckless driving will not be allowed.

Keep in the center of the roads and use extraordinary precaution in entering the cemetery gates. Care must be taken to avoid running upon the grass borders of the sections.

Slow down in turning corners, as other vehicles and persons may be hidden from view by shrubbery.

Automobiles must not be driven past funerals going in the same direction; when meeting a funeral or approaching a lot where burial services are being conducted, proceed very slowly or, better still, courteously come to a stop until the services are at an end.

Do not try to pass a horse showing signs of fear; come to a stop and let the ho se go by.

The horn must not be sounded unless

The horn must not be sounded unless absolutely necessary; remember that the majority of visitors are on foot and that their rights must be respected.

Persons wilfully disregarding the above

Persons wilfully disregarding the above regulations or neglecting to strictly observe the proprieties due the cemetery will be prosecuted.

Motor cycles admitted only upon permit issued at the office, $% \left(1\right) =\left(1\right) \left(1\right) +\left(1\right) \left(1\right$

Teaching Practical Civic Improvement.

How may citizens of the smaller towns be educated to appreciate and assist in promoting civic beauty?—J. G., Kas.

In answer to J. G., Kas., asking how citizens of smaller towns may be educated up to "Civic Improvement," I will state that less than a year ago I was a highly honored member of the "down and out club" due to the reaction of the panic of 1907, and was more than willing to work for a pittance. However, I picked up a b'g city paper that has a hobby of running practically a page daily of civic improvement news liberally supplied with half-tone reproductions of civic beauty. This suggested an idea. The idea was "practical education." The paper abounded in results, but did not tell how to produce them. I submitted an article and it was gobbled up eagerly, with a request for more of the same dope. I was then

doing job work in a very small city. After the third article appeared people began to sit up and take notice; after the sixth they began to take a little nourishment, first in homeopathic dosage. Now they are taking allopathic treatment and I employ seven men. The same thing may be accomplished anywhere where there is soil and water. "Civic Beauty" is a contagious disease. The public at large, whether in the burg of 75 or the industrial center of seven hundred and fifty thousand, are anxious to become infected. The trouble is with the florist and gardener, not with the public. In complete ignorance of the simple rules of good soil preparation and intelligent handling of plants, trees and shrubbery the florist and gardener has gloated over the layman, thinking he'd make more money the more failures were met. Discouraged, the layman lost heart, only to have feeble, spasmodic returns to beauty after a visit to some city where civic beauty reigns supreme. The remedy lies in educating the layman to the rules for success in the simplest manner and language possible, taking him through the kindergarten as it were to the ward school. After you've got him well along in the ward school he, of his own volition, will want to enter the high school of landscape gardening. I have found publishers of small papers of very limited circulation equally as anxious to publish them as big city papers, for the subject calls for supplies practically from all lines of legitimate merchandising and the business acumen of the editor sees increased advertising. In the past we have been too jealous of our "secrets" fearing the layman would do the work himself. On the contrary, his efforts usually result in failure, as he tries to impart the knowledge to incompetent labor who are mere automata trained to kill time and draw dividends Saturday night for doing it. After one or two efforts he comes to the man who has been educating him and is willing to submit to a fair price in return for a fair service. Try educational Publicity. TEXAS.

Getting Rid of the Cottony Maple Scale.

There seems to be too little knowledge of the Cottony maple scale, as to the remedies, etc. The pest is causing some alarm here. What is the best way to keep the past down? Can some one give information from experience?—W. W. H., N. Y.

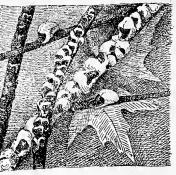
The Bureau of Entomology of the

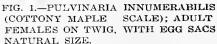
Department of Agriculture has published an illustrated monograph, "The Cottony Maple Scale," issued as Circular No. 64 of this Bureau, which may be otbained on application to the department. It gives a very complete description of the insect, its habits and its parasites, from which we gather the following information:

Sporadic outbreaks of the Cottony maple scale, *Pulvinaria innumerabilis*, in various parts of the country have been reported from time to time for many years, but in each case natural enemies have subsequently increased

it on 47 different species of trees, shrubs and vines including various species of maples, oak, linden, elm, willow, poplar, beech, hawthorn, sycamore, locust, hackberry, osage orange, mulberry, grape, poison ivy, apple, pear, plum, peach, currant. gooseberry, rose and Virginia creeper.

The large white, flocculent masses resembling popcorn fastened to the twigs which appear on infested trees during the month of June, are the cottony (really waxy) ovisacs of the female, provided for the retention of the eggs after oviposition (fig. 1).





sufficiently to effectually check its progress. Recently many reports of its extreme abundance have come from Chicago and vicinity, and from various sections of Illinois, Indiana, Wisconsin and Iowa. It is interesting to note that most of the reports of serious injury by this insect come from those states or portions of states north of the fortieth parallel, where it seems to be attacked by fewer parasites than in the southern regions. A map of its distribution prepared from locality cards shows that it is distinctively an Upper Austral zone species, but occasionally reaches the Transition zone. The cottony maple scale is classified in the soft, unarmored group (Non-Diaspinæ) of the family Coccidæ, and does not differ superfically from the Lecaniums, except in the mation of an ovisac by the female of the Pulvinaria. The male insect is a very small and delicate twowinged fly which develops its latter stage under a glassy test or covering and emerges late in August or early in September.

The various species of maples, especially the soft maple (Acer Saccharinum), including the box elder (Acer Negundo), are the favorite food plants of this species. The writer of this bulletin has, however, found



Fig. 2.—Pulvinaria innumerabilis: a, newly hatched young; b, female, third stage, from above; c, same from side; d, male, third stage; e, same, natural size on leaf and petiole; f, same, enlarged on leaf petiole, showing two specimens parasitized; all greatly enlarged except e.

These may contain as many as 1,500 minute, oval, pale reddish-yellow eggs.

The larvæ hatch at various dates from June 1 to August 15, depending on the latitude and exposure to the sun's rays. After remaining in the ovisac for a day or two, they swarm over the twigs, instinctively migrating toward the light, and settle on the leaves along the midribs and veins, always preferring the under surface (fig. 2,c). The larvæ on boxelder become active somewhat in advance of those on maple. This difference may be due to the food, but it must be remembered that the shade of the box-elder is less dense than that of the maple, and consequently the greater amount of heat and light may be the controlling factor. The male larvæ, when fully grown, assume a propupal stage from which they pass to the true pupal stage, having a pinkish hue. In a few days the winged males appear, but remain beneath the scale for two or three days before emerging. The females at this time have a few dorsal brownish markings and have undergone two molts. The males and females copulate in September, and soon afterward a small

proportion of the females migrate to the twigs, where they insert their probosces and become fixed for the remainder of their existence, meanwhile changing from a greenish color to buff and finally brown, with a slightly tessellated waxy covering. In this condition the winter is passed.

When the sap begins to flow in the early spring the female grows rapidly, mainly because of the rapid development of great numbers of eggs within the body. In May or early June the ovisac begins to form from the fine waxy threads exuded from the posterior spinnerets, pushing backward and upward until the body of the female is almost vertical to the twig. Meanwhile the ovisac is gradually being filled with eggs, which hatch and undergo all the changes mentioned above. Thus, fortunately, there is but a single brood each year.

Notwithstanding the extreme prolificacy of this insect, it is usually held in check by its many nutural enemies. Doctor Howard has observed the English sparrow apparently feeding upon the full-grown scales. The twice-stabbed ladybird (Chilocorus bivulnerus Muls.) is a common enemy of this as of other scale insects, particularly in its early stages. The smaller similarly marked Hyperapsis binotata Say and H. signata Melsh, are also valuable enemies of this species. The writer found in the severely infested parks and cemeteries in Chicago that the egg-contents of 80 to 85 per cent of the cottony ovisacs had been destroyed by the white mealy larvæ of Hyperaspis. predaceous caterpillar of Laetilia coccidivora Comst. has been an efficient ally in controlling the pest in the vicinity of Washington, D. C. Several species of Leucopis nigricornis, Egger, a common dipterous parasite of aphides, were reared from cottony Several species of maple scale. chalcid flies are truly parasitic upon the cottony maple scale. There is no doubt that many more Pulvinarias are killed by these interesting little fellows than by all other enemies.

REMEDIES.

In dealing with an infestation by the cottony maple scale, the most important matter to be considered in each case is the advisability of artificial means of control under the existing conditions. The natural enemies of this pest have done and are still doing such effective work in its control, that it is a question whether remedies should be applied when the infestation is not serious. Nature al-

ways maintains a balance, and this pest cannot be in the ascendancy for any great length of time. On the contrary its parasites will eventually multiply so rapidly as to completely check its progress, and it may even narrowly escape extermination.

Insecticides applied for a pest always kill its parasites and oftentimes predaceous enemies are also destroyed. Hundreds of larvæ of Hyperaspis binotata were found to have been destroyed by a summer treatment with kerosene emulsion for the cottony maple scale in parks of Chicago, and no doubt thousands of the minute chalcids were killed, as they were found quite plentifully on unsprayed trees.

If it is necessary to resort to artificial means of control, as seems to be the case in some sections, the spraying should be delayed until fall or winter, when the Hyperaspis is hibernating at the bases of the trees among lichens, moss or dried grass. Care should be exercised in the use of spray, and the bases of trees should be covered with canvas or other suitable material to prevent the spray from running down the tree-trunks and collecting at their bases.

When the trees have become dormant, after the falling of the leaves, they can be trimmed and thoroughly sprayed with a strong kerosene emulsion, which will kill every scale reached by the spray, without injury to the trees. Scarcely one-fourth the quantity of emulsion is required to spray a tree in winter condition that is necessary when a tree is covered with dense foliage and both sides of the leaves must be reached with the spray. Some excellent results have been obtained by Mr. S. Arthur Johnson in experiments against this pest in Denver, Colo. He found that kerosene emulsion 25 per cent or more in strength or whale-oil soap at the rate of 1 pound to 1 gallon of water was very effective, apparently killing all scales which received the spray.

Kerosene emulsion of not more than 10 to 12 per cent of oil can be thoroughly applied with safety to maple trees, but the tips and margins of the leaves may be injured even at this strength. Box-elder will be almost defoliated with a 12 to 15 per cent solution. Less than a 10 per cent emulsion will be of little value against the young unless they have recently hatched. Since the hatching period may extend over six or eight weeks, it will be seen that more than one spraying will be necessary to insure success, and, coupled with

the fact that it is a very difficult and disagreeable task to thoroughly spray a tree in foliage, the winter treatment will be found more satisfactory in every way. And at that season the larvæ of predaceous beetles would not be destroyed.

Kerosene Emulsion: Stock solution (66 per cent oil).

Kerosene (coal-oil, lamp-oil), 2 gals.; whale-oil or laundry soap (or 1 quart soft soap), ½ pound; water, 1 gallon.

Dissolve the soap in boiling water, then remove from the fire, add the kerosene immediately and thoroughly agitate the mixture until a creamy solution is obtained. This can be done by pouring the mixture into the tank of a spray-pump and pumping the liquid through the nozzle back into the tank. This is a stock solution, which must be diluted before using. In order to make a 10 per cent emulsion, add to each gallon of the stock solution about 6 gallons of water and agitate thoroughly before using. For a 30 per cent solution add to each gallon of the stock solution 11/2 galons of water and agitate thoroughly. This strength will kill a large percentage of the hibernating females, without injury to the trees. If a good naphtha soap can be obtained, the preparation of the emulsion will be simplified. It will be unnecessary to heat the solution, since the kerosene will combine readily with the naphtha and soap and form a perfect, cold, milky-white emulsion when the mixture is thoroughly agitated. If naphtha soap is used, double the amount called for by the formula and emulsify in soft (rain) water.

Keeping Squirrels in Check

Many complaints regarding the destructiveness of squirrels in the treelined districts of Chicago have been addressed to Mr. J. H. Prost, city forester. To remedy this Mr. Prost suggests that to put an end to their operations in the destruction of birds' nests and young birds, one of the worst offenses of the little animal, trees where birds are nesting should be surrounded by wire collars having points bent outward and down at close intervals so that the animals cannot climb the trees and get to the nests. Squirrels also destroy garden seeds. He says: "I believe the trouble is largely because the people have let the squirrels do as they please, and the consequence is they are monopolizing some places to the exclusion of birds and the like."



TWO HISTORIC CEMETERIES OF PHILADELPHIA

There are 365 cemeteries located in Philadelphia and adjacent territory according to an undertaker's local guide book, but probably less than twelve accommodate the greater number of the interments.

Philadelphia contains a number of notable "cities of the dead," to which visitors are attracted either for the beauty of their situations, adornments and monumental works, or for their historical associations. Many of the Friends' burying-grounds are highly interesting to those acquainted with local families and history; and the suburban churches often stand in the midst of beautiful little graveyards where the ashes of the founders of the city and the commonwealth have long reposed. The oldest cemetery of the city, however, answering to Greenwood in its relation to New York, is Laurel Hill. This great and highly ornamented burying-ground covers the high eastern bank of the Schuylkill, between the East (Fair-



ENGLISH IVY USED ATTRACTIVELY AROUND THE BASES OF MONUMENTS IN WEST LAUREL HILL.

mount) Park and Wissahickon Park, Laurel Hill was founded in 1835, and therefore is, next to Mount Auburn, near Boston, the oldest suburban cemetery in the country. It now contains about one hundred acres, all of which has been laid out with skill, and beautified by the managers and lot owners.

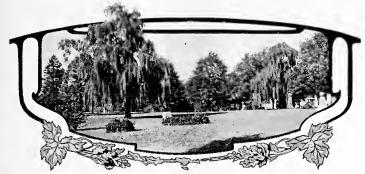
The cemetery is divided into three parts-north, south and central. North Laurel Hill is the original part, and took its name from the fact that it was previously "The Laurels," the homestead of the Sis family. South Laurel Hill was "Harleigh," the country seat of the Rawle family; while George Pepper formerly occupied Central Laurel Hill as an estate named "Fairy Hill." The south entrance is through rather an old-fashioned but dignified gateway, whose massive posts are crowded by symbolic urns; but the principal entrance is that to North Laurel Hill, where an archway through a fine temple-like structure admits one to the sacred grounds. Just within this stately en-



VIEW IN CENTRAL DIVISION OF LAUREL HILL CEMETERY.

trance is a group of statuary, cut in brown-stone by Thom, which is the chief ornament of the grounds in a Old Mortality will recall the scene.

Its natural beauty of site and scenery, embellished by much skill and



SOME FINE TREES IN WEST LAUREL HILL CEMETERY.



SLAB WITH PLATE GLASS FOR LIGHTING UNDERGROUND VAULT, WEST LAUREL HILL CEMETERY.

labor; the variety and magnificence of its monuments, together with the

names of its distinguished dead, have long made Laurel Hill famous as a place of interest in Philadelphia.

The perpetual care fund, amounting in 1909 to \$263,-650.07, provides for the care of the cemetery walks, drives, walls, enclosures, buildings, trees, plants, etc. This fund is held in trust by the Girard Trust Company, of Philadelphia.

Nurseries and greenhouses under the direct management of the cemetery company are located in Central Laurel Hill, where there is a large assortment of plants and cut flowers.

West Laurel Hill Cemetery, an entirely separate tract from Laurel Hill,

Montgomery County. The cemetery lies on a table-land protected on two sides by precipitous ravines, and on the front by bluffs, falling rapidly away to the Schuylkill river.

The natural beauties of the location have been enhanced by the planting of a great variety of trees—the continued care of the grass and soil—the construction of broad substantial stone roads—the erection of suitable buildings and engineerings and land-scape work which is equaled only by the largest public parks.

The selection of the site of West Laurel Hill was the result of an exhaustive survey. No other location in the environs of Philadelphia could be found combining all the requisites



ENTRANCE TO RECEIVING TOMB AND PORTE-COCHERE, WEST LAUREL HILL.

of a cemetery. West Laurel Hill was dedicated for burial purposes in 1869 and the first interment was made in May 5, 1870.

Besides a comprehensive general illustrated book, West Laurel Hill issues from time to time handsomely prepared special books that are models of good cemetery advertising. Their special books on "Grave Decorations" and on "Brick Graves" have been illustrated and described in detail in PARK AND CEMETERY.

No less interesting is the special 48-page illustrated book on the "Trees and Shrubs of West Laurel Hill."

The trees and shrubs of West Laurel Hill Cemetery have been carefully tagged and numbered. This illustrated catalogue furnishes the common and botanical names corresponding to the numbered tag on each tree. It is the intention of the cemetery company, from time to time, to add trees to the growth already on the cemetery, until an assortment of ornamental trees and shrubs suitable for the climate of Philadelphia may here be found.



TYPICAL LAWN VIEW IN WEST LAUREL HILL.

public way. It is a group exhibiting Old Mortality at his favorite occupation of restoring defaced tombstones, pausing a moment to converse with Sir Walter Scott. Readers of Scott's is one of the most beautiful and carefully devloped of the Philadelphia burial grounds. It is situated between the Schuylkill river and Belmont avenue, just beyond the city limits, in

CONTRASTING CEMETERY LANDSCAPE PICTURES

The two cemetery views shown on this and the next page typify contrasting landscape effects that are both produced with consummate art in the two cemeteries in which the pictures were made. The one illustrates the problem of relieving and been done by the lilac shrubs in luxuriant bloom in the foreground. The picture is from the handsome illustrated book of the cemetery of which mention has been previously made in these pages.

The other picture is one of the

years in Allegheny shows to better advantage than the lands that have been regraded and reseeded to lawn. During the last seven years over 25 acres in large patches here and there over the grounds have been treated in this way, and this does not include



MOROSINI MAUSOLEUM AND ITS SETTING, WOODLAWN CEMETERY, NEW YORK CITY.

setting off mausoleum work and the other the making of those broad, undulating, park sections that form the chief beauty of the modern rural cemetery.

The G. P. Morosini mausoleum illustrated is in Woodlawn Cemetery, New York, and is a fine piece of highly finished mortuary architecture in Pink Westerly granite. The sharp lines of its gables projecting one on each side, make particularly necessary some form of planting to relieve the angles and corners and make them blend with the landscape. The picture shows how effectively this has

plates from the elaborate portfolio of views and compendium of information issued by Allegheny Cemetery of Pittsburg, of which several examples have already been shown in these pages. It is one of the finest park pictures to be seen in any cemetery, and reveals a magnificent stretch of landscape looking from section 22 across Section 28 to the Penn Avenue entrance, whose massive stone tower may be seen in the distance. This tower and the architecture of the cntrance it marks have previously been illustrated in PARK AND CEMETERY.

Perhaps no improvement of recent

the hundreds of private lots that have been regraded and seeded.

Beginning at Penn avenue, all of the field to the left, going out, was regraded and reseeded; so too was that beautiful broad lawn to the right. A few years ago the ugliest thing in the cemetery was the unkempt naked gravel hill forming the west end of Section 28; and across the road from it the deep ravine, a natural dump for all debris. Today the hill is gone, and a smooth grassy slope—one of the choicest sections of the cemetery—is there instead. And into the ravine, 37 feet deep, the gravel hill



was emptied, and now that ravine is filled full, and there a broad field of grassy lawn prevails.

For interment purposes the cemetery has been divided into 39 sections. Besides these, however, there is a deal of unoccupied and unplatted land, excellent for burial lots, and much woodland hill that is unfitted for interments. Of the 39 sections, all except No. 38 are in use. Section 38 is the broad, level piece of land in

the ravine ϵ ast of the conservatories. It was platted and offered for sale in 1902 and some lots sold in it, but in 1904 the superintendent requested that this section be withdrawn from sale, which was done.

Each section contains one or several acres and is completely surrounded by a main driveway, except when one side of it is formed by an outside boundary wall or fence. The sections are then subdivided into lots

so that every lot borders on a grass or gravel pathway or main road, and many of the larger lots have a grass pathway all around them. The larger lots usually border the main driveways and because of the curving of the roads the outside lots are seldom of uniform dimensions. There is no such a thing as a "half lot." smallest lot is what is known as a 6-grave lot, which contains 150 square feet.

IMPORTANT LITIGATION OVER PATENT MAUSOLEUM

The matter of the patentability of certain features of monument and mausoleum construction has in the past few years brought out some interesting court decisions as to what cannot be patented, and another no less interesting lawsuit involving a patent for mausoleum construction is now before the courts in Baltimore.

In the celebrated Lockwood case which was in litigation for a period of several years, the court decided that the mere arrangement of certain members of a monument finished in a certain way, was not patentable because it did not involve anything new or novel, inasmuch as it was merely a rearrangement of old forms and methods of finishing that had been used before. In the case of Tayntor vs. Goetschius, also recently decided by the courts, Mr. Tayntor's method of joining the roof stones on which he held a patent was similarly held to be unpatentable because it was a method of joining stones that had been used before, and was not essentially a new invention.

In the present suit in Baltimore, M. L. Knight, who holds a patent on certain features of mausoleum construction, has brought suit against Henry P. Rieger & Co. for building a mausoleum involving his patented construction. He claims that his invention embodies improved means for obtaining ventilation and drainage of crypts, improved methods of closing and sealing the crypts and other novel features set forth in the patent specifications printed below. The patent involves chiefly a system of setting the shelves of the crypts in the walls, with "rectangular" openings to form air passages.

Rieger & Co., claim that they did not follow any particular piece of work in preparing their plans, but used the methods of construction commonly employed throughout the country. They maintain that the general plan followed is to build the crypts of slate or marble independent of the walls with air spaces between the slate and the granite, cutting openings into the back of each crypt to admit a circulation of air through each compartment. They claim that there is nothing new or patentable in the alleged invention and that nearly all of the mausoleums constructed to-day would violate the invention if it were held valid.

The case is therefore of considerable importance to the trade at large, since if Mr. Knight's patent is upheld by the court, he would doubtless be able to find many other infringements throughout the country. Mr. Rieger presented the matter briefly to the National Retail Monument Dealers' Association at its Cincinnati convention and it was deemed of sufficient importance to be referred to a special committee, which is to investigate the case and report its findings to the executive committee of the association. This special committee had not been appointed at the time of the closing of the convention but is to be named by President Stewart later.

In order that the definite points involved may be studied in detail we reproduce herewith the illustrations in the official specifications for the patent, and the description accompanying them as given in patent No. 979,965, issued to Maurice L. Knight, December 27, 1910. The patent specifications read as follows:

Figure 1 represents a perspective view of a mausoleum embodying my improvements. Fig. 2 represents a longitudinal vertical section of the same. Fig. 3 represents a horizontal section of the mausoleum. Fig. 4 represents a transverse vertical section on the line x—x of Fig. 3. Fig. 5 represents a sectional detail view of a shutter and its fastenings of one of the crypts or loculi. Fig. 6 represents a horizontal section of a window.

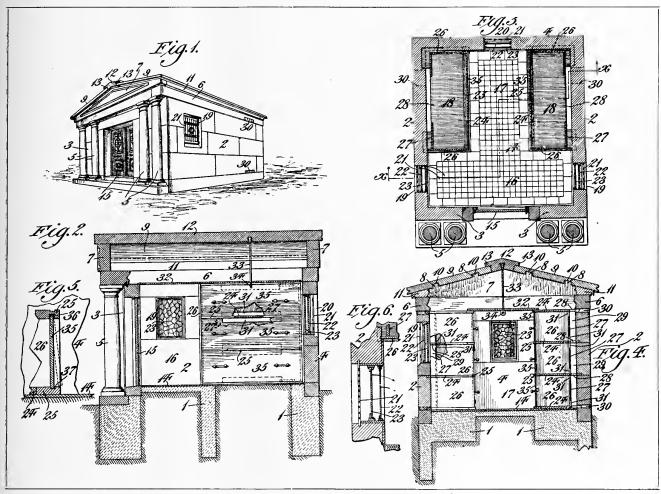
Similar numerals of reference indicate corresponding parts in the figures.

Referring to the drawings:-The mausoleum has a suitable foundation, 1, upon which the side walls, 2 and the front wall, 3, and rear wall. 4. are supported. A porch or portico is formed at the front by columns, 5, and the frieze, 6, overhangs such porch at the front. Gable stones, 7, are supported upon the frieze at the front and rear, and have each two tenons, 8, upon each of their inclined top-edges. Two roof-stones, 9, of stone, metal or composition, are slantingly supported at their ends upon the slanting edges of the gable-stones, and have mortises, 10, engaging the tenons upon the same. At the eaves, the roof stones or slabs are supported upon slanting fillers, 11, which may be integral with the frieze-stones. A cap-stone or ridge stone, 12, rests upon the inner or upper edges of the roof-stones with its sidelips, 13, overlapping such edges. The interior of the mausoleum lips, 13, overlapping such edges. has a floor, 14, of tiles or any suitable or desired material and construction.

A door, 15, is provided in the front wall of the mausoleum and opens into a transverse vestibule, 16, extending the full width of the structure. A longitudinal corridor, 17, extends rearward from the vestibule, between the crypts or loculi, 18, and window openings 19-19, and 20, are provided respectively at the ends of the vestibule and of the corridor. Said windows have each a rigid grille, 21, at the outside, an intermediate inwardly swinging storm-window, 22, and an inner, inwardly-swinging art window, 23, of stained or colored glass or otherwise ornamented. The crypts or loculi for the reception of the coffins or caskets and on both sides of the corridor, are formed from horizontal shelves or slabs, 24, preferable of slate or composition, and faced at the edges which present to or face the corridor, strips, 25, of marble or other ornamental material. The slabs or shelves are vertically spaced by end walls or slabs, 26, and back walls or slabs, 27, suitably secured to the shelves and to The rear edges of the shelves are cut away to form each other. each other. The rear eages of the shelves are cut away to form rectangular openings, 28, and the back slabs are supported at a distance from the walls of the structure and at the edges of such openings, so that vertical air-chambers or flues, 29, are formed between such walls and slabs. These openings extend along the greater portion of the length of the slabs and register vertically, so that the air-chambers will be wide and unobvertically, so that the air-chambers will be wide and upper structed. Vent-openings, 30, are formed at the lower and upper ends of these air-chambers and through the walls, so as to pro-The vide air-circulation up through said chambers. have openings, 31, at their upper and lower edges, communicating with the air-chambers or flues, to provide ventilation at the top and bottom of each crypt or loculus, and drainage from the bottom of the same and said openings extend for more than onehalf of the length of the back-slabs, so as to afford free ventilation and drainage to the wide air-chambers, and the openings register with those of the shelves so as to directly communicate with the same. A ceiling-slab or slabs, 32, is supported to cover the vestibule and corridor, and one or more rods, 33, are secured in the ridge-stone and passed through the ceiling-slab and have each an eye, 34, at its lower end. The rod or rods may serve as an auxiliary support for the ceiling-slab and serve to support hoisting device for raising the caskets to the upper loculi.

fronts of the crypts or loculi are each closed by a shutter, 35, preferably a slab of marble or other ornamental material, and the upper and lower edges of the shutter engage respectively grooves, 36 and 37, in the shelves or slabs, the upper one, 36, of which is deeper and slightly wider than the lower groove, so as to permit the upper edge of the slab to first engage the upper groove, as indicated in dotted lines in Fig. 5, and move upward in the same until the lower edge can drop into the lower groove, when both edges are held in the grooves, whereupon the shutter may be sealed by grouting or pointing with cement or mortar. The back edges of the shelves are secured in the inner faces of the walls and interlock with them excepting at the openings forming the air flues.

have sold and erected mausoleums embodying this patent, and to have affixed to them the word "patented," together with the day and year the patents were granted as required by law. He claims further that he submitted to Miss Laura Praeger, for whom Mr. Rieger built the mausoleum in question, plans and specifications and that the prospective purchaser submitted to Rieger & Co. certain material parts of his specifications to bid on and that Rieger & Co.'s plans were "in all material and substantial respects substan-



THE KNIGHT PATENTED MAUSOLEUM CONSTRUCTION.

By providing the air duct between the crypts or loculi and the wall of the vault or mausoleum structure, by providing such duct with inlet and outlet at the lower and upper ends, and by forming the back walls of the crypts or loculi with openings at their top and bottom edges, communicating with such air duct, I provide perfect circulation and ventilation from the loculi through the ducts, over the ceiling-slab and out to the surrounding atmosphere, thereby disposing of all odors and gaseous effuvia from the contents of the loculi and keeping the interior of the structure pure. All liquid effluvia may pass out from the loculi through the bottom openings into the ducts and be conducted away from the same. By providing the transverse vestibule and the windows at the ends of the same and the corridor, the interior of the structure may be perfectly ventilated and lighted. The storm windows are preferably of clear glass and, together with the grilles, protect the ornamental art windows. The rod or rods depending from the ridge stone may form additional support for the ceiling slab or slabs besides serving as support for hoisting apparatus when a casket is placed in one of the upper loculi. By connecting the space under the roof and above the ceiling with the aid ducts, such space will be ventilated and maintained dry, even should moisture leak through the seams of the roof. The shutters of empty loculi will be held in place in their grooves without the use of cement or other fastening means and it is only necessary to seal the shutters as the loculi become occupied.

Mr. Knight, in his bill of complaint, in filing suit against Mr. Rieger, says that he is the "true, original, first and sole inventor" of the improvements described above, which were not "known or used before his invention." He claims to

tial duplicates" of his original plans and drawings. He asks for an injunction to restrain the defendants from constructing any more mausoleums embodying this construction and for damages.

Rieger & Co., in their answer, filed with the court, deny that the alleged improvements are patentable, and deny that they submitted to the purchaser plans that were substantially duplicates of those of Mr. Knight. They allege on the other hand that they submitted their own original plans and drawings, and deny that there was any confederation between them and the prospective purchaser; in fact they say that Mr. Knight "kept full care and control of all plans, drawings or specifications submitted," "not leaving them at any time in the care and keeping of the defendants," Miss Praeger, the purchaser, being made one of the defendants in the suit.

The case has not yet been completed. Up to the present time Mr. Rieger's attorney, William B. Smith, of Baltimore, informs us, the complainant has produced only two witnesses. Proceedings are at present waiting for him to go on with his case.

INTELLIGENT IMPROVEMENT of a COUNTRY CEMETERY

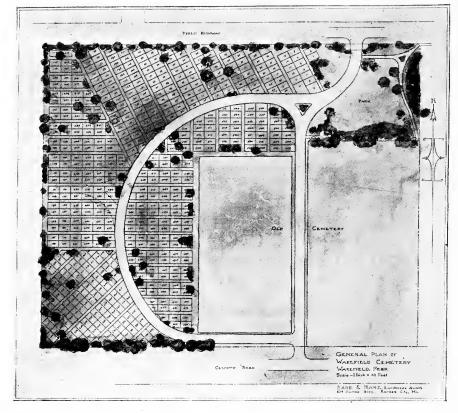
Everyone is familiar with the typical small cemetery, serving rural communities or small towns, and knows the conditions of desolation and neglect that, through long association, seem to have become a part of it

badly neglected, but is disfigured by a network of sunken walks and an uncontrolled display of stonework.

Realizing that an improvement could be made upon the previous arrangement, the cemetery association secured the services of Hare & Hare, set aside. Other recommendations made, along with the plans, were briefly as follows: To limit the height of head markers to six or eight inches, or level with the ground; to allow monuments only on whole lots; and to sell half lots, cheaper lots, and single graves only in suitable locations.

A point of interest came up in changing the lot arrangement from that formerly in use, which was 12x14 foot lots in groups of four surrounded by a six foot walk and having a four foot walk dividing the group in the center; thus using 42 per cent of the block area for walks.

In the new plan ample access is allowed with five foot walks between every other tier of lots, thus using only an average of 14 per cent of the block area, and effecting a saving of 28 per cent over the former plan, which, even at the moderate rate of twenty cents per square foot, would amount to about \$2,400 on each platted acre, or many times the cost of the complete landscape plans for the entire five acres. While it is not claimed that so great a saving can be made in all cases, it is generally true. Economy, as well as beauty, are keynotes in modern cemetery planning. The closer adaptation of roads and lots to the topography may also affect a saving in construction far in excess of the cost of plans. All this is surely as important to a small cemetery as to a larger one.



PLAN FOR ADDITION TO WAKEFIELD CEMETERY, WAKEFIELD, NEB. HARE & HARE, LANDSCAPE ARCHS.

There are several reasons for these conditions. The land has been purchased cheaply and it was usually necessary to sell it at a correspondingly low figure, and as a consequence, with no provision for care and maintenance. Utility has been, very rightly, uppermost, though of course not the far sighted utility that should have been considered. Beauty has been a very secondary consideration, left to the private lot owners; and their scattered efforts have added little if any to the beauty of the whole. In short, organized effort and comprehensive planning have been lacking; due partly to an erroneous impression that the services of a landscape architect or cemetery expert were far beyond the reach of cemeteries of their size.

At Wakefield, Neb., is a small cemetery of about three acres to which it has lately become necessary to add more ground. This cemetery is not

of Kansas City, to plan the five acres of reserve ground. The ground was visited, and then complete lot and planting plans and other working drawings furnished. The accompanying general plan shows the arrangement of the new ground and its relation to the old. A small park surrounding the entrance made use of land from which burying was prohibited by a neighborhood agreement. A lot unit of 12x20 feet was adopted, allowing ample room for six graves, with a small monument, or five graves with a large monument. The custom of burying with the feet toward the east, being still much respected in the community, influenced the arrangement of lots to some extent. It was decided upon recommendation of the landscape architects to place about half of the lots, those nearest the entrance, under perpetual care, selling them for enough that at least fifteen cents per square foot can be

AQUEDUCT UNDER A CEMETERY

In the claim for \$3,000,000 made by the Kensico Cemetery Association against the City of New York, for land condemned for the new Catskill aqueduct which came up before Justice Tompkins, last month, the Justice allowed 30,000 plot owners to be represented. The Corporation Counsel made application for the city for permission to amend its petition so that the fee in the course through the cemetery shall be turned into an easement. It was brought out during the hearing that the city intends to lay three pipes large enough to allow an automobile to pass through four feet below the surface of the ground in the cemetery, and it is contended that there will be a ridge through the cemetery that will disfigure the landscape and that it will be impossible to bury the dead near the route of the aqueduct. Justice Tompkins reserved decision.

A. A. C. S. CONVENTION ECHOES

Frank Eurich, Detroit, Mich., and Geo. W. Creesy, Salem, Mass., still maintain their unbroken record of having attended every convention since 1887. John Reid, Mr. Eurich and R. J. Haight were the only others present at Philadelphia who were at the Cincinnati meeting when the association was organized.

Robert D. Boice, Geneseo, Ill., took as lively an interest in the convention as ever, despite his 82 summers. His winters do not seem to make much of an impression. Mr. Boice wishes to thank all of his convention friends "for their kindly care and attention."

T. Donlan, superintendent, Oakdale cemetery, Wilmington, N. C., wore a handsome gold badge in the form of a cross encircled with a laurel wreath, suspended from a bar, of which he had just cause to be proud. The badge was a present from the ladies of Wilmington and is inscribed as follows: "Timothy Donlan, 1862, Fidelis 1910, presented by Cape Fear Chapter, U. D. C., May 10, 1910." Accompanying the badge was a testimonial letter beautifully expressive of the appreciation of Mr. Donlan's long years of service.

William Falconer had recently returned from a trip to England, Scotland and France. In a recent issue of the Florists Exchange he says: "The style of flower gardening over there has changed a good deal from what it was in my time, forty years ago. Then ribbon borders and mass and pattern beds were much in evidence, and the herbaceous borders were more spotted with individual plants than paneled in clumps as they now are. Nowadays, the prevailing taste seems to be for large panels of one variety in the borders, and in the beds, high plants stuck into carpets of lesser ones. Some carpet bedding is yet attempted and it is well done, too, but nowhere did I see anything to compare with that at Schenley Park here in Pittsburgh. The grotesque and ridiculous in designs there, as well as here, have disappeared and pretty little scroll or pattern plans are given instead. While at Kew Gardens Mr. Falconer had the pleasure of seeing a big patch of lilies, Nymphaea William Falconer, his namesake, in full bloom.

Under the direction of Rev. J. P. Harrington, superintendent of Catholic cemeteries in that city and vicinity, reforms are being introduced for the regulation of grave mounds and the restriction of stone work that are decidedly in advance of many of the best known lawn plan cemeteries of today. A contribution on this subject is promised PARK AND CEMETERY in the near future.

Ex-president James Currie, Milwaukee, who was prevented by illness from attending the meetings on the last day, has expressed his pleasure at the selection of his city for the 1912 meeting. There is more than a muchly advertised beverage to make Milwaukee "A Bright Spot" as it is so widely advertised. Mr. Currie, it will be remembered, is a member of the board of park commissioners, as well as superintendent of Forest Home cemetery. He will have the co-operation of a progressive business men's organization in entertaining the visitors.

Cemetery officials who did not receive a copy of the souvenir program of the Philadelphia convention, may have one by addressing Chas. B. Jefferson, West Laurel Hill cemetery, Pencoyd P. O., Pa. It contains in addition to the programme and a list of the members of the A. A. C. S., a historical sketch of Philadelphia, views of parks and cemeteries and other matter.

their few burial grounds near Ponca City, Okla. These wandering people maintain these and send their dead long distances for burial. Last month the body of a 15-month old child of John Bryler, a gypsy, was sent to Ponca City from Fayette-ville, Ark., where it died.

The proximity of the proposed Frisco railroad switch yards to the Fairview Cemetery, Joplin, Mo., promises to become the main card of the West Joplin club in its fight against the switch yards ordinance.

Captain I. B. Robinson, of Brownsville, Tex., has received the appointment to the position of superintendent of the National Cemetery, Springfield, Mo., made vacant by the recent death of Superintendent Joseph Dodson. The removal of the cemetery from Brownsville was the immediate cause of Captain Robinson's transfer.

Among several ordinances introduced at a recent regular meeting of the city council, of Racine, Wis., was one to provide for establishing a permanent maintenance fund for the public cemeteries. The lot owners of Mound cemetery have been anxious for some time to have a permanent fund provided for its perpetual care. Under the present arrangement the city council sets aside a certain sum each year to be used for cemetery purposes, but under the new plan the fund will be given a good start by receiving the moneys from the sale of 100 or more lots in Mound addition.

At a meeting of St. Vincent's Church congregation held recently in Plymouth, Pa., it was decided to abandon the present cemetery and accept the proposition submitted by the Kingston Coal Co. for the proposed new cemetery on the mountain back of the D. & H. No. 4 breaker.

The suit contemplated by the heirs of Z. B. Job, of Alton, Ill., pertains to acquiring the oldest burial ground in Illinois, the Milton Cemetery, for conversion into residence property. The site in controversy was once the Village of Milton, which was turned into a cemetery when an epidemic killed all of the inhabitants. Milton Cemetery antedates the famous Kaskaskia burial ground and it was during the life of the village of Milton, that a great Indian massacre occurred. A monument rises on the ground where the white population were scalped by the Indians. It is quite close to the old cemetery.

Although standing for 140 years in the heart of what is now a congested

CEMETERY NOTES

Serious opposition confronts the promoters of a non-sectarian cemetery, to be known as Valhalla, and to embrace an 82-acre tract adjoining Glen Echo Club, St. Louis, Mo., which it is said, may cause the project to be withdrawn. The tract was recently bought for \$73,000.

The overflow of a neighboring irrigation ditch recently caused some heavy washes in the Union Cemetery, La Grande, Ore. Mr. J. H. Hutchinson, owner of the ditch, has agreed to make repairs.

It is not generally known that gypsies of the United States have one of

residential district of Baltimore, Md., the old Etting Cemetery, probably the oldest burying ground in Baltimore, is known to few of its citizens. Hidden behind high brick walls and tall gray gates, the cemetery has stood on North avenue, less than 100 feet off Pennsylvania avenue, all these years, and the thousands who pass its gates daily do not know that generations of the Etting family lie buried there. The high gates were always closed.

Under a cemetery law passed by the last Michigan legislature it is possible for the city of Houghton to compel the owners of the old Protestant cemetery in that city to make whatever repairs are necessary to place it in good condition. The new law making cemetery improvements compulsory.

Although actual graves will not be assessed by the tax assessor, unsold burying lots, which heretofore have brought no revenue to Spokane County, Wash., must pay their quota to help defray county expenses. It was recently learned that although cemeteries conducted for profit are liable to assessment to the extent of the unsold lots, they had never been taxed.

Mr. Herbert Wellington, superintendent of the local cemeteries at Lexington, Mass., on September 3 called upon the local police to stop the burial of a dog in the cemetery. Mrs. Sarah Bowman Vanness, a former regent of the Daughters of the American Revolution, wished to have a dog burial in her family lot, beside her husband's body, but police stopped it at the grave, and she was forced to bury it on her estate, temporarily at least. It is believed she will contest the order.

The directors of Woodmere Cemetery Association, Detroit, Mich., are considering a plan to increase their capital stock from \$50,000 to \$250,000.

Gov. Dix, of New York, signed Senator Harte's bill, permitting existing cemetery associations and corporations to use for cemetery purposes lands within the limits of New York City, lawfully taken by recorded deed and devise and set apart for cemetery purposes.

The newest project in the field of municipal ownership comes from Vienna, Austria, and is a decidedly picturesque and interesting one—a cemetery in a forest. Every effort will be made to preserve the sylvan character of the spot. The Vienna city council insists that all the gravestones and monuments be of artistic

design, and each of the latter are approved by the cemetery director before they are placed in position.

Last month Alex. T. Butler, an attorney of Casper, Wyo., filed an appeal in the United States land office, asking that the Franco-Wyoming Oil Company be prevented from erecting a refinery on land deeded by the government to the town of Casper, for cemetery purposes, but not so utilized.

As a result of a hot campaign by the stockholders against John Western, late secretary and manager of the Roseland Park Cemetery Association, the Detroit "Journal" reports that a civil action has been brought against him to compel an accounting for moneys handled and also a charge of forgery.

Without ceremony or formality of any kind, the first stone in the opening of the gateway between the Confederate and the National cemeteries, at Springfield, Mo., was removed on Sept. 13, from the partition wall between them, by Engineer C. E. Phillips, who has had general direction of the improvements planned for the cemeteries.

A united campaign for opening the San Francisco cemeteries has been inaugurated by the Richmond Federation of Improvement Clubs, an organization representing all the improvement clubs of the Richmond district. As a beginning, the federation wants Sutter street extended through Laurel Hill Cemetery westward to make an almost straight connection with Clement street by meeting Euclid avenue at its junction with Parker avenue on the west side of the cemetery.

Hancock, Md., finds itself in the unpleasant position of having practically no more room in its cemeteries, a condition brought about by its failure to acquire cemetery property, when the opportunity offered.

Unless a tract of land being considered for a cemetery contains iron ore, the city of Eveleth, Minn., after 18 years without a burial place, will have a graveyard located near town.

The parsonage and cemetery of the First Presbyterian Church in Elmsford, White Plains, N. Y., were last month advertised for sale for taxes. In the cemetery is the grave of Capt. Isaac Van Wart, one of the captors of Major Andre. Near the grave of Captain Van Wart is that of Solomon Utter, the carpenter who built the gallows on which Andre was executed. Others buried there are Abraham Martling, a Continental sol-

dier who was present at the surrender of Lord Corwallis; Gen. William Hammond and Capt. John Romer, who fought back the British at the battle of White Plains. Col. John L. C. Hamilton, of Elmsford, has issued an appeal to the patriotic residents of Westchester County and throughout the state to contribute toward saving the cemetery. The residence of Archer Reed, at whose house the church was organized, on February 18, 1787, still stands at Eastview, and is owned by John D. Rockefeller.

The work of preparing the new St. Vincent's Catholic cemetery, at Plymouth, O., donated to the church by the Kingston Coal Co., to take the place of the old cemetery which has been seriously damaged by mine caves, has been under way for some time and the ground is now ready for the removal of the dead from the old cemetery. Moore Brothers, of Plymouth, undertakers, will have charge of the work. There are 2,500 bodies to be moved. The cemetery comprises 50 acres of ground.

There are said to be scarcely more than one hundred plots for graves remaining in the cemeteries situated in the eastern part of San Antonio, Texas, over which the city government has control, and appropriations will be necessary to provide for burying the city's dead at the Mission burial grounds. This tract contains 530 acres and is situated five miles south of the city on the Corpus Christi road.

Vigorous protests of property owners and others, against the establishment of a cemetery in an important section of Tacoma, Wash., has brought about an agreement to repeal an ordinance recently passed, granting permission to create a cemetery in that section. The Annie Wright girls seminary, to be erected nearby, was a strong factor in the opposition.

On the program of the Denver, Colo., Real Estate exchange, at its recent first fall meeting, was a renewal of its protest against the reopening of Mount Calvary cemetery, and a recommendation to the city authorities that a bureau in the highway department be established for the purpose of keeping streets other than those paved with asphalt in good repair. It is asserted that the re-opening of Mount Calvary Cemetery, for which an ordinance was prepared, would be a decided step backward. The ordinance was later killed in the council.

The Kansas City, Kas., park department will have charge of Oak Grove Cemetery in the future, providing no legal obstacles are found. A committee from the Council of Women's Clubs and the Mercantile Club explained to the commissioners that the city's only cemetery was going to ruin for the lack of attention. The city purchased the cemetery in 1864, and since all the lots were sold it has not been properly cared for.

The Ladies' Auxiliary of the Oakdale Cemetery Association, Worcester, Mass., met recently and received reports. The principal matter was that on water supply, on which a committee has been busy and reported that the work was half completed.

J. Robert Reid, secretary of the Wakefield, Mass., Cemetery Commission, has won his long fight for the custody of the records of his board and the office of the State Commissioner of Public Records has ordered Reid's colleagues, Chairman John Minniken and Hoyt B. Parker, to turn over to him before Oct. 13 all books, plans and records in their possession.

Harry E. Garner has filed a petition for the appointment of a receiver for the Mount Zion Cemetery Company, Baltimore, Md., claiming that the company is indebted to him in the amount of \$810. At a meeting of the directors a resolution was passed whereby the company admits that it is unable to meet the demands made upon it for payment of loans and claims, and has filed its answer to that effect. The court appointed Clarence E. Downes as receiver, the bond being \$5,000. Mr. Ferdinand C. Link is the president of the company.

The village of Forest Park, and suburb of Chicago, has passed an ordinance authorizing a toll to be charged for every vehicle which traverses the streets of Forest Park. The five cemeteries west of Chicago, can only be reached now virtually by the payment of a vehicle tax, which will place a prohibitive cost on every funeral procession going that way. The annual fees are: for single horse vehicle, \$4; for double horse vehicle, \$8; for single seated automobiles, \$10; for double seated automobiles, \$20. According to this schedule drivers of hearses must pay \$8 to use the streets of the village. Every vehicle in the procession will have to pay from \$4 to \$20. The ordinance is looked upon as a spite measure to bring Chicago to the point of meeting the village authorities on the traction question. The cemeteries

which can be reached only by driving through Forest Park include Mount Carmel, Forest Home, Waldheim, Altenheim, and Concordia.

NEW CEMETERIES

E. V. Thompson and wife of Dayton, Wash., have deeded to the town of Starbuck seven acres west of town and near the Tucannon river, to be platted for a cemetery.

Some six completed sections, containing 800 lots, of the new Catholic cemetery near Stella, N. Y., have been consecrated.

Articles of incorporation have been filed for a new cemetery association. the property located near Mishawaka, Ind. It is capitalized at \$20,000 and expects to transform the Daniel Ward farm, two and a half miles east of Mishawaka, on the interurban line. into a modern cemetery. The plat contains 50 acres of land, of a sandy soil, well adapted for cemetery purposes. The name of this corporation is the Twin Branch Cemetery Association. Besides the above a \$50,000 corporation has been organized to provide a burying ground where the St. Joseph County Country Club is now located. It will be known as the Hill Crest Cemetery, and will be located in the sixty-five acre plat of ground along the St. Joseph river.

The new Jewish cemetery in Fairmount, Denver, Colo., was opened September 1. It consists of fifteen acres and adjoins the greenhouses, close to the entrance. The ground cost the Jewish association \$15,000 and more than \$3,000 has been expended in general improvements. Within a short time it is expected the 1,200 bodies now buried in the old Jewish cemetery, which adjoins Calvary Cemetery, near Congress Park, will be removed to the new cemetery.

At a recent regular meeting of the city commissioners of Birmingham, Ala., a resolution was passed, granting permission for the location of a cemetery for negroes near Mason City with the provision that in case of any protest on the part of citizens in this section action on the matter might be rescinded.

With the completion of the first thirty acres of the property of the Mount Scott Cemetery Association, Portland, Ore., substantial progress has been made on Portland's thoroughly modern cemetery. The tract owned by the association contains 335 acres. The land is high and rolling and is one of the most beautiful tracts near the city. The improvements have cost some \$75,000, and it is

planned to begin the development of another unit at an early date,

What is promised to be one of the most attractive Catholic burial grounds in the State of Ohio is comprised in a tract of 214 acres south of Columbus, near Shadeville. Rt. Rev. Bishop Hartley is superintending the work of preparing the grounds.

At the special town meeting of Willimantic, Conn., held August 26, the plans for the new cemetery were accepted and the sum of \$5,000 appropriated to grade and lay out the land.

CEMETERY REPORTS

In the third Annual Report of the Board of Park Commissioners, on the Public Cemeteries of the City of Hartford, Conn., for the year ending March 31, 1911, Mr. G. A. Parker, superintendent, draws attention to the annual saving in maintenance due to the regular care given to the cemetery trees and grounds; year by year. The improvements for the year were almost entirely confined to the roads of the Old North Cemetery. It is not generally known that the late eminent landscape architect Frederick Law Olmsted, who was born in Hartford, is buried in the tomb where his father and mother rest in the old North Cemetery. On this lot stands one of the largest and most nearly perfect beech trees in Hartford-"a fitting monument to the man who loved trees and knew their value in the lives of men and in the beautifying of cities." In addition to the appropriation made by the City for the care of the cemeteries there was received for sale of lots, \$2,376 .-50, and for care of lots, opening graves, etc., \$2,149.20. There was expended for maintenance and improvement, \$8,134.08.

ADDITIONS AND IMPROVE-MENTS

The trustees of the Oakwood Cemetery Association, Joliet, Ill., have decided to proceed at once with the construction of an administration building on the lot recently purchased on the north side of Cass street.

The Brooke Cemetery Company, Wellsburg, W. Va., is making preparations to improve the entrance and grounds of the cemetery. The entrance will be widened and a stone retaining wall and stone gate posts built, which will greatly improve the looks of the cemetery.

Frank Purtman, commonly known as Peter Potter, for many years living in seclusion a mile west of Oakesdale, Wash., died recently and bequeathed a three-acre tract of land to the Oakesdale Cemetery Society, reserving the right to be buried there himself.

A twenty-acre addition to Mount Hope Cemetery, San Diego, Cal., has been opened by the City Cemetery Commission. It is laid out on the modern lawn plan, and no lot copings are permitted.

The Evergreen Cemetery, Chicago, Ill., has recently purchased 30 acres at the southwest corner of Kedzie avenue and Eighty-seventh street for \$24,000. This gives the cemetery a total of 127 acres in all, extending from Eighty-seventh to Ninety-first streets and from Kedzie to Central avenue on the Grand Trunk Railroad.

Work has commenced on the Ricker memorial chapel in Pine Hill Cemetery. Dover, N. H., under the will of Mrs. Mary A. Ricker as a memorial to her daughter, the late Mrs. James F. Gallagher. The chapel will be erected on a large lot in a beautiful location. The plans, drawn by Alvah T. Ramsdell, a local architect, provide for a brick structure 32x60, with a square tower, under which will be a driveway. The trimmings will be of cut granite.

Forest Lawn Cemetery, Omaha, Nebr., will soon be equipped with an up-to-date crematory. Mr. H. S. Mann, secretary, has been east investigating the best examples, and other officials have been in Minneapolis and Chicago on the same errand. The building will be constructed of granite, the interior will be highly decorative with most approved materials, and although it is the present intention to use oil in the furnace it will be so equipped that electricity can be easily installed. Forest Lawn comprises 320 acres, of which only 25 have been sold.

An addition of 22 acres to St. Matthews Cemetery, St. Louis, Mo., was dedicated the 17th of this month. The cemetery is now better equipped than ever before.

L. White & Son have been awarded the contract to put in the extension to the water system in the North Cemetery, Oxford, Mass.

It is stated that a crematorium will be erected in Woodmere Cemetery, Detroit, Mich., in the near future.

A determined and continuous effort is being made to clean up and repair the crumbling monuments, etc., in Church Street Cemetery, Mobile, Ala., once the only burial plot in that city. Many well known names are inscribed on the tombs. The cemetery association is earnestly inviting the co-op-

eration of all who have relatives buried there.

The Mt. St. Benedict Cemetery Association, Hartford, Conn., has bought a tract of land adjoining the cemetery on the east, which will be used for burial purposes as soon as it can be prepared.

A movement is on foot among certain of the reformed Jewish socialists of Brockton, Mass., to open a new Jewish cemetery.

The Aspen Grove Cemetery association, Burlington, Ia., recently closed the deal for something over twenty acres of land adjoining the present cemetery grounds on the north. The additional ground was bought of the Burlington Golf club. This deal was not an immediate necessity but to safeguard the future.

A chapel to cost from \$12,000 to \$15,000, will shortly be built at Pine Lake cemetery, Michigan City, Ind. The edifice will be a memorial. Plans for the structure which are being prepared by Allen & Son, architects.

An attractive new fence, costing \$700, has been placed around Pinewood cemetery, West Point, Ga.

Harlan P. Kelsey, the well-known landscape gardener, of Salem, Mass., has recently been in Spartanburg, S. C., advising on the improvement of Oakwood cemetery.

The Harlingen, Tex., Priscilla Club has decided to layout and improve the cemetery at that place.

A people's campaign has been inaugurated for the beautifying of Lone Fir cemetery, Portland, Ore., where many of the soldier dead lie buried. Of the \$10,000 required for the improvements over half has been pledged.

A new entrance to Magnolia Cemetery, Mobile, Ala., opening on Virginia street, is being constructed by the city. By using the new entrance autos will be permitted to enter the cemetery, but funeral processions must have the right of way at all times.

The 22-acre addition to St. Matthews Cemetery, St. Louis, Mo., was dedicated and consecrated on September 17th.

Beth Emeth cemetery, which lies to the west of the Rural, at Albany, N. Y., has this year been almost completely developed as far as its present bounds. Only those of Jewish faith are buried in the cemetery.

The application of the Middle Patent Cemetery Association for permission to extend its cemetery by adding 3 1-2 acres that have been presented to the association for ceme-

tery purposes, was made to the Board of Supervisors on Monday, Sept. 11. The cemetery is located in the upper part of the town of North Castle, N. Y. Permission was granted.

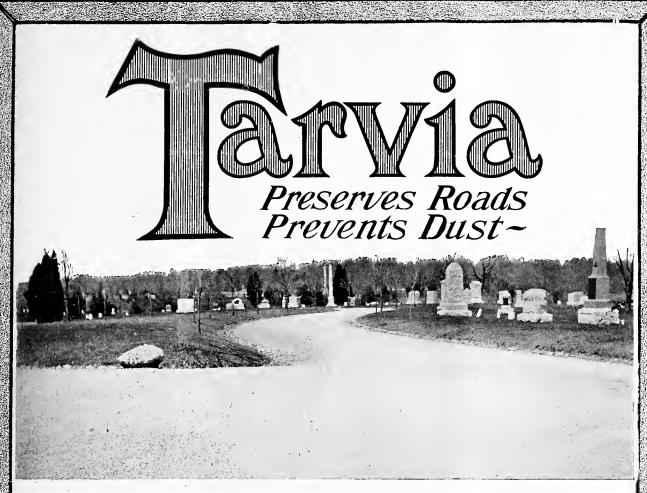
A note from Fremont, Neb., says, the Danish residents of Maple township have taken advantage of a new law, and have organized a Danish Cemetery association. The new law gives the cemetery association a right to condemn land for burial purposes when the owner refuses to sell at a reasonable price. The owner of the land adjoining the cemetery last fall refused to sell any more land for burial purposes, although the cemetery was full. If the land in question cannot be purchased by the Cemetery association it will be condemned under the new law.

St. Agnes Cemetery, Albany, N. Y., a beautiful "city of the dead," has recently added to its original area an additional tract of some 62 acres, bringing to total area of the cemetery up to 112 acres. The new land formerly belonged to the John Hart estate, adjoining the old cemetery, on the south. The new superintendent, Mr. Charles T. G. Flaherty, is putting through considerable changes in the improvement of the grounds by the inauguration of the town plan, which in the new portion, will be compulsory, and in the old, will be carried out for the lot owners who wish it.

(Concluded on page VIII)

THE COVER ILLUSTRATION

On the front cover of this issue we illustrate a pleasing design of cemetery entrance, which offers a practical suggestion in properly protecting and beautifying burial grounds. The entrance shown is that of the Washington Cemetery, located on the beautiful parkway at Parkville, Long Island. It was designed and built by the Stewart Iron Works Company, of Cincinnati, Ohio, over ten years ago. Approximately 2,500 feet of iron fence was required to enclose this acreage, situated as it is conveniently near to New York City. The ornamental iron gateways to the Washington Cemetery, of which there are six, are each 15 feet wide by 8 feet high in center. The fence is 6 feet high, made in 8 foot panels with 34inch long pickets and 5%-inch short pickets of square bars, tipped with malleable spear ornaments. Both durability and simplicity are predominating characteristics of this fence, which is of sufficient height and strength to give that sense of security necessary to all high class cemetery property.



ROADS IN NATIONAL CEMETERY, ARLINGTON, VA., TREATED WITH TARVIA A

Tarvia for Cemetery Roads

The following is a significant excerpt from the proceedings of the Association of American Cemetery Superintendents, held at Chattanooga a few months ago.

At a session devoted to road problems, somebody inquired about Tarvia. The following dialogue took place:

Mr. H. W. Ross, of Newton, Mass.—"I think Tarvia makes as good a surface as and it lasts much longer, and it is not as liable to be slippery for the horses. When you get a heavy frost on the tar road it is not so hard for horses to stand as with asphalt roads, as horses can get a better foothold on the surface."

Mr. G. L. Tilton, of Graceland Cemetery, Chicago.—"We have tried Tarvia, both the surface application and also in road construction. We used what is called Tarvia 'A'—that is a surface application—and the road does very well indeed. We constructed about a mile and a half of Tarvia 'A.' Some of it has been down for three years and it is in a good state of preservation, but it ought to be resurfaced, probably next year. We did not find it at all slippery; not as much so as asphalt. It makes a road apparently as good as and of much cheaper construction. We built about a mile and a half this year and the cost was 42 cents a square yard. We think it ought to last for a good many years and makes a road as good as asphalt. It is similar in appearance and is not damaged by automobiles and heavy traffic."

The President—"That is mighty cheap construction."

Tarvia is ideal for cemetery roads, because it gives to the macadam surface the plasticity which enables them to support the transportation of heavy monuments, also because the tarviated surface is waterproof and hence dries quickly after a rain and is not muddy, being at all times suitable for pedestrian processions, Tarvia reduces maintenance expense so much as to more than pay for itself. Booklet on request

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TOPICAL INDEX to OUTDOOR LITERATURE

An Index to articles on Gardening, Forestry, Park, Cemetery and Civic Improvement and kindred subjects in leading general and special magazines

Subscriptions will be received for any magazine or periodical at club rates with Park and Cemetery. Publications in which articles appear are listed below, and referred to by abbreviations, thus: S. L. 8:67.8, Feb. 09, means: Suburban Life, vol. 8, pages 67.8, February, 1909, Single copies should be ordered direct from the publications at addresses given below.

PUBLICATIONS INDEXED AND ABBREVIATIONS USED.

American Botanist, Jollet, Ill. (A. B.), 75c year; 20c copy.
American City, The, (Am. C.), New York, \$1.00 year; 10c copy.
American Florist, Chicago (A. F.), \$1.00

American Florist, Chicago (A. F.), \$1.00 year; 5c copy.

American Homes and Gardens, New York (A. H. G.), \$3.00 year; 25c copy.

Architectural Record, New York (Arch. Rec.), \$3.00 year; 25c copy.

Art and Progress (A. & P.), Washington, D. G.; \$1.50 yr.; single copy 15c.

Beautiful Homes (B. H.), St. Louis, \$1.00 year; 10c copy.

Canadian Fiorist, The, Peterboro, Ont., Can. (C. F.), \$1.00 year; 10c copy.

Canadian Municipal Journal, Montreal (C. M. J.), \$1.00 year; 10c copy.

Clty Hall, The, Des Moines, Ia. (C. H.), \$2.00 year; 20c copy.

Conservation, Washington, D. C. (Cons.), \$1.00 year; 10c copy.

Country Life in America, New York City (C. L. A.), \$3.00 year; single copy.

City (C. L. A.), \$3.00 year; single copy, 25c.
Country Gentleman, Albany, N. Y. (C. G.), \$1.50 year; 20c copy.
Century Magazine, New York City (Cent.), \$3.00 year; 35c copy.
Survey, The, New York City (Sur.), \$2.00 year; 10c copy.
Chautauquan, The, Chautauqua, N. Y. (Chaut.), \$2.00 year; 25c copy.
Craftsman, The, New York City (Cr.), \$3.00 year; 25c copy.
Embalmers' Monthly, Chicago (E. M.), \$1.00 year; 10c copy.
Fern Bulletin, Jollet, Ill. (F. B.), 75c year; 20c copy.

Fern Bulletin, Jonet, In. (F. 2.), typer; 20c copy.
Florists' Exchange, New York City (F. E.), \$1.00 year; single copy, 5c.
Florists' Review, Chicago (F. R.), \$1.00

Forest Leaves, Philadelphia, Pa. (Fer. L.), \$1.00 year; single copy, 10c.
Fruit Grower (F. G.), St. Joseph, Me., \$1.00 a year; 10c copy.
Gardener's Chronicle of America, Jersey

Civic Improvements, Home Grounds

Art in the Schools, by Henry Turner Bailey. Illust. A. & P. 2:354-58. Oct., '11.

Birds, the Attack On. Outlook. 97: 802-3. Apr. 15.

Bird Culture, Experiment Station for by O. H. Sample. Illust. A. H. G. 8:345-7.

Birds, Wild, Refuges for. By J. L. Cowan. Illust. Overland Monthly. 57:637-42.

Civic Co-Operation With the Public Schools. By Elsa Denison. Illust. A. C. 5:124-30. Sept., '11.

City Block Reconstruction. By Bernard J. Newman. Illust. A. C. 5:131-5. Sept., '11.

City, the Twentieth Century. By H. B. F. McFarland. Illust. A. C. 5: 138-9. Sept., '11.

Conservation of the Forests. By Gifford Pinchot. Illust. Sci. Am. 105: 135. Aug. 12, '11.

Gardens and Landscape Garding. Evergreens, Fall Planting of. ByGeorge H. Chisholm. Illust. C. A. 13:145-7. Sept., '11.

Fali Planting, Why It Is Good. By

Clty, N. J. (G. C. A.), \$1.00 year; single copy, 10c.
Garden Magazine, New York City (G. M.), \$1.00 year; single copy, 15c.
Gardening, Chicago (Gard.), \$2.00 year; single copy, 10c.
Gartenkunst, dle, Frankfurt. Germany (German), G. K., \$4.00 year; 50c copy.
Good Roads Magazine, New York (G. R. M.), \$1.00 year; single copy, 10c.
Horticulture, Boston (Hort.), \$1.00 year; single copy. 5

Horticulture, Boston (Hort.), \$1.00 year; single copy. 5c.

House Beautiful (H. B.), Chicago; \$3.00 year; 25c copy.

House and Garden, Fhiladelphia (H. G.), \$5.00 year; 50c copy.

Independent, The, New York (Ind.), \$3.00 year; 25c copy.

Landscape Architecture (L. A.), Harrisburg, Pa.; \$2.00 year; 50c copy.

Meehan's Garden Bulletin, Germantown, Philadelphia (M. G. B.) 50c year; 5c copy.

5c copy.
Minnesota Horticulturist, Minneapolis

Minnesota Horticulturist, Minneapolis (M. H.), \$1.00 year; single copy, 10c.
Moeller's Deutsche Gaertner-Zeltung,
Erfurt, Germany, (German), M. D. G.,
\$3.00 year; 10c copv.
Municipal Engineering, Indianapolis,
Ind. (M. E.), \$3.00 year; single copy, 25c.
Municipal Journal and Engineer, New
York (M. J. E.), \$3.00 year; single copy,
25c.

York (M. J. E.), \$3.00 year, single 125c.

Monumental News, Chicago (M. N.),

\$1.00 year; single copy, 10c.

National Nurseryman, Rochester, N. Y.

(N. N.), \$1.00 year; single copy, 10c.

Pacific Municipalities, San Francisco (P.

M.), \$1.00 year; 10c copy.

Revue Hortlcole, Parls (Rev. Hort.),

French, \$4.50 year; 50c copy.

Scientific American, New York (Sci.

Am.), \$3.00 year; 10c copy.

Suburban Life, New York (S. L.), \$3.00

year; 25c copy.

Suburban 2007, Sear; 25c copy.
Survey, New York (Sur.), \$2.00 year;

10c copy.
Woodland and Roadside, Boston (W. R.),
50c year; single copy, 10c.

J. C. Whitten. Illust. G. M. 14: 106-8. Oct., '11.

Flower Borders at Hampton Court Near London. By William Falconer, F. E. 32:588. Sept. 23, '11.

Garden Notes from Tidewater Virginia. By Clarence Fowler. Hort. 14:396-7. Sept. 16.

House, Planting About the. By M. R. Conover. Illust. G. M. 14:116. Oct., '11.

Garden Art, Exhibit of at Oldenburg. G. K. (German). Illust. 13:168-72. Sept., '11.

Rockefeller Gardens at Pocantico Hills. By R. H. Moulton. Illust. S. L. 13:205-6. Oct., '11.

Roses, Autumn Planting of. By W. S. Rogers. Illust. G. M. 14:118-9. Oct., '11.

Parks, Cemeteries and Public Grounds Chemical Fertilizers, European Use of. Sci. Am. Supplement. 72:80. July 29, '11.

Conservatories From a Commen-Sense Point of View. Illust. L. Tuthill. House Beautiful. 30:124-5. Sept., '11.

Greenhouse Construction and Heat-

ing. By W. R. Cobb. Hort. 14: 430c. Sept. 23, '11.

Park, Small, Designing and Building of, at Corning, N. Y. By R. H. Canfield. Illust. A. C. 5:140-2. Sept., '11.

Playground Detail, A. By J. S. Robeson. Illust. A. C. 5:150-1. Sept.,

Public Park, The. By Fritz Encke. Illust. G. K. 13:161-8. Sept., '11.

Trees, Shrubs and Plants

Anemones, the Fun of Collecting. By Wilhelm Miller. Illust. G. M. 14: 110-12. Oct., '11.

Aquatic Plants, Biological Conditions of. Harpers' Weekly. 55:25. Aug. 12, '11.

Fern World, Word From. Illust. Cr. 20:623-7. Sept., '11.

Fernworts, Rare Forms of. By W. N. Clute. Illust. F. B. 19:50-2. Apr., '11.

Hickory Trees Threatened by Destruction. By J. J. Levison. Illust. G. M. 14:109. Oct., '11.

Square Deal for the Trees. By L. G. Vair. Illust. A. C. 5:143-9. Sept.,

Street Trees. By Stadt Garten Direktor Heicke, Frankfort. Illust. G. K. (German). 13:172-6. Sept., '11.

PERSONAL

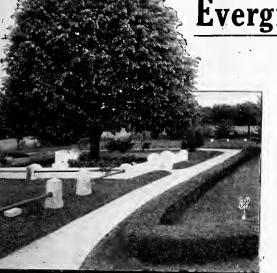
Many of our readers will join us in sincere regret to learn that Dr. J. V. N. Standish, of Galesburg, Ill., president of Hope Cemetery Association, and of the Municipal Improvement Association of that city, has quite recently lost his wife. In informing us of his bereavement he remarks that she was one of the best botanists in the whole country.

Sid. J. Hare, of Hare & Hare, landscape architects of Kansas City, Mo., has just closed a contract with H. S. Cook, formerly with Forest Hill Cemetery, to become superintendent of Highland Park Cemetery, Kansas City, Kan., under a three-years' contract.

OBITUARY

A cable message received September 2 by Mrs. L. B. Root, of Kansas City, announced the death of her son, L. P. Root, 33 years old, at San Sebastian, Salvador, Central America, from an electric shock. Mr. Root is the son of the late Louis B. Root, best known as the superintendent of Swope Park and Mount Washington Cemetery. Mr. Root has been associated for the past nine years with the mining industries of Central America. No particulars of the accident was incorported in the cablegram. Mr. Root was not married.

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R. J. HAIGHT 440 S. Dearborn St., Chicago EDITOR5

John W. Weston O. H. Sample Subscription, \$2.00 a Year. Foreign, \$2.25 Canada, 2.25

PUBLISHER'S NOTES

The Lansing Wheelbarrow Company of Lansing, Michigan, has reorganized, and changed its name to Lansing-Company, for the reason that its old name was not comprehensive enough to embrace the entire line of goods it manufactures.

In addition to a complete line of wheelbarrows and warehouse trucks, an extensive line of steel scrapers, concrete and mortar mixers, automobile turntables, cast iron, rubber and fibre wheels for trucks and cars, push carts, etc., is also made.

The Lansing-Company does not belong to any combination or trust; it is as entirely independent as it was under the old name.

After a recent meeting with Mr. George E. Kessler, landscape architect, the Park Board of St. Joseph, Mo., announced that an agreement had virtually been made to establish the first of St. Joseph's projected chain of driveways on 28th street. The boulevard scheme contemplates the construction of a 100-ft. driveway on 28th street, from Osage street south to Frederick boulevard, thence south to Messanie street. This is the first step in the projected chain of boulevards to connect Krug Park and Burnes Park.

PUBLICATIONS RECEIVED

Official Register, 1911-12, Dept. of Landscape Architecture, Harvard University. Cambridge, Mass.

P. J. Berckmans Co., Augusta, Ga.: 1911 illustrated catalog.

"Choice Plants for Fall Planting": Illustrated catalog from Wagner Park Conservatories, Sidney, O.

Fall 1911 and Spring 1912 catalog of Azaleas, Rhododendrons and other Hardy Native American Plants from Harlan P Kelsey, Salem, Mass.

Richland Nurseries, Rochester, N. Y.: Illustrated catalog of trees, bulbs and peonies.

New Floral Guide, Autumn, 1911: Conard & Jones Co., West Grove, Pa.

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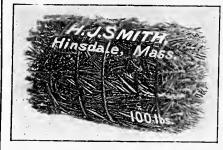
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Hemlock by Bale, Ton or Car Load Sample bale of any, 75 cents, F. O. B. Order now before the rush.

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Certainly the best I have used. — J. G. Wall-lemiscerd, Buffalo Burial Ass'n. . . . It is quite as effective as other makes and costs less. — W. T. B. Roberts & Son, Glenside. . . . I recommend it heartily. — Chas. Murray, Washington University.

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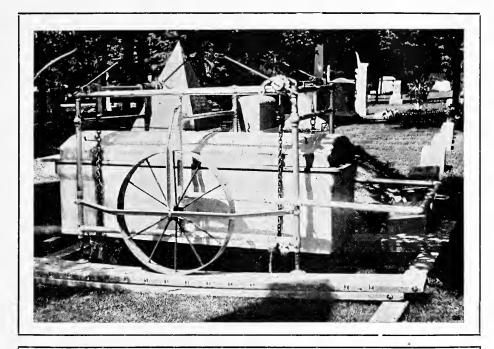
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HE above cut shows a special truck for the handling of cement vaults, and also for disinterring purposes. It will be noticed that the truck can be placed over a vault, and the vault raised up into the frame, and by hitching it to a conveyance of any kind, it can be taken to the grave, and successfully placed over the grave, and the vault low-

ered into it, as simply as the ordinary casket can be lowered into the grave with a lowering device.

It is supplied with ratchets and brakes, so that there is no chance for a mishap of any kind. For disinterring purposes, there is a set of hooks, which hook under the rough box or casket, and it can then be drawn up into the frame and moved to any part of the cemetery and reburied.

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Corner Detroit & Hird Sts., Cleveland, Ohio for particulars.

CEMETERY IMPROVEMENTS

(Concluded from page 681)

The new Calvary Cemetery, between Perth Amboy, N. J., and Fords, Woodbridge Township, owned by the Magyar Reformed Church, of the above town, was consecrated on September 10.

Judge L. Y. Sherman of Springfield, Ill., president of the state board of control, has announced that the terms of \$8,100 for twenty acres of land adjoining the State Soldiers' Home in Springfield, have been accepted and the deal closed. grounds will be used for state and national encampments and also for a national cemetery.

With appropriate exercises and ceremonies the Orthodox Hebrew cemetery, which, located on the Collier's Ferry road, near Magnolia cemetery, Beaumont, Texas, was dedicated September 10. The cemetery was recently purchased by Ansha Chaim lodge No. 180 of the Progressive Order of the West, and presented to the Orthodox Hebrew congregations of Beaumont.

A special meeting of the Board of Aldermen of Columbia, Miss., was held recently for the purpose of discussing, selecting and purchasing a suitable place for the City Cemetery, as it is badly in need of one. The present cemetery has been in use for over 100 years, and has become too small for further accommodation. A committee was appointed to investigate.

Papers of incorporation were recently filed in the probate court, Birmingham, Ala., by the Grace Hill Cemetery company, capital stock of \$40,000. The company will start business with \$25,000 paid in, with headquarters in Birmingham, and will maintain a cemetery. The officers are J. P. Hill, president; Burr Ferguson, vice-president, and A. F. Kennmer, secretary.

DUSTLESS ROAD MAKING

(Concluded from page 661)

damage caused by previous traffic. The Tarvia A process is more thorough than the Tarvia B work because of the greater tenacity of this grade of Tarvia, its longer life and the greater thoroughness of the penetration.

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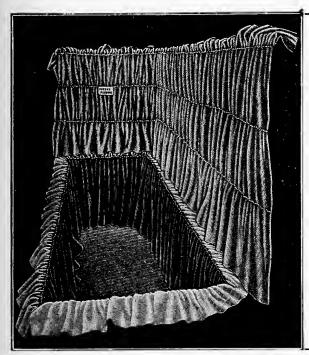
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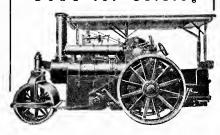
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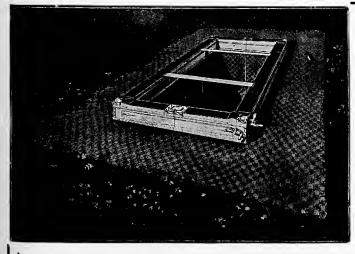


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NURSERY STOCK PRICES

(Continued from page 662)

put myself on record as being against the practice and I do so again now, but I still maintain, as I have done in the past—that until some plan is devised whereby a standard trade price is fixed and maintained on every item and on each grade of nursery stock grown we, as nurserymen can only float along, cut each other's throats

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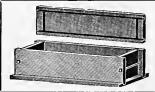
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and at the end of the year count up our profits or losses and pray for the time to come when we can get together in some way and adjust this most difficult and knotty problem, but until that time comes, how are we to know what is a trade price and how much more are we to charge the landscape gardeners, the park and cemetery superintendents; and even then we must devise some plan other than a "gentleman agreement" to compel each nurseryman to stick to it.

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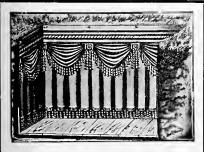
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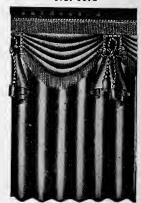


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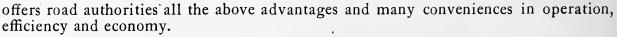
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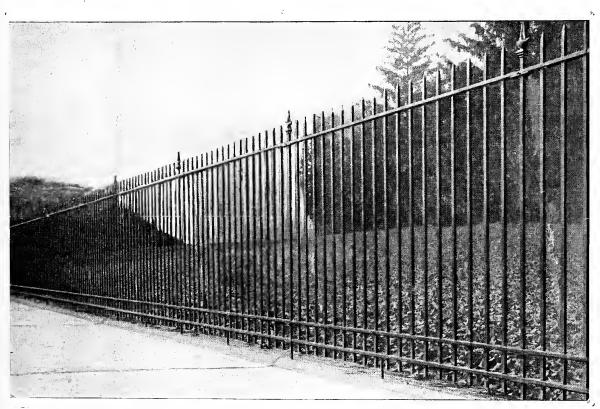
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Published Monthly by R. J. Haight, 440 S. Dearborn St., Chicago

Vol. XXI., No. 9

NOVEMBER, 1911



SECTION OF FENCE AT ROSE HILL CEMETERY, CHICAGO. See page 706.

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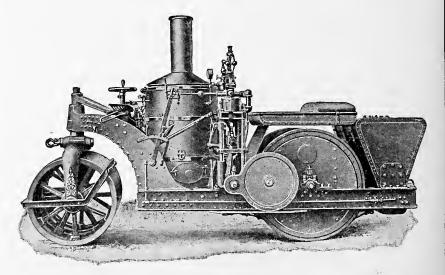
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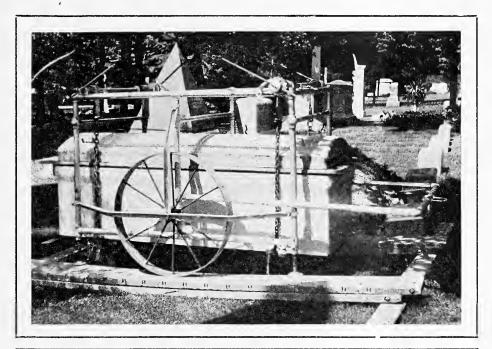
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HE above cut shows a special truck for the handling of cement vaults, and also for disinterring purposes. It will be noticed that the truck can be placed over a vault, and the vault raised up into the frame, and by hitching it to a conveyance of any kind, it can be taken to the grave, and successfully placed over the grave, and the vault low-

ered into it, as simply as the ordinary casket can be lowered

into the grave with a lowering device.

It is supplied with ratchets and brakes, so that there is no chance for a mishap of any kind. For disinterring purposes, there is a set of hooks, which hook under the rough box or casket, and it can then be drawn up into the frame and moved to any part of the cemetery and reburied.

Two men are all that are required to handle any size

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Photographs showing this device in operation from many different views will be forwarded on application. The demand for our elevator for mausoleums is most satisfactory.

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It is being more appreciated every day. Planters are beginning to realize that the success of a planting will depend largely upon the class of stock used.

Good plants may be a little more expensive—It costs more to grow them, but they are worth the difference. The superiority of Trees and Shrubs properly grown, over ordinary stock is so evident that any trifling difference in the first cost is offset by results obtained. That's the point—First cost is of secondary importance. Best results are what you want—They can only be had with good stock. When comparing prices investigate the quality.

We offer a most complete assortment of plants that have been grown right and will give satisfaction. Send for our Fall Catalogue. It's just out.

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You will admit that confidence is the result of things well done. This being so, we have hundreds of houses from Maine to California, covering over half a century of building experience, that stand for confidence well placed. These facts mean a good deal to you.

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CHICAGO

PARK AND CEMETERY

AND LANDSCAPE GARDENING_

Vol. XXI

Chicago, November, 1911

No. 9

The American Civic Association

The Seventh Annual Convention of the American Civic Association will be held at the new Willard Hotel, Washington, D. C., December 13-15, 1911. A very full program is being arranged, and addresses will be made and discussions held upon such subjects as "National, State and City Parks," "City Planning," to the finer details of Neighborhood and Home improvement, to the Smoke and Billboard nuisances and to the House Fly problem. The Association has become such a power in the directions in which it applies its energies as emergencies arise, that its annual conventions and conferences become important affairs in the national progress for the betterment of our American humanity. As we look back upon the influence for effective treatment of the great subjects coming within its sphere, such as the Preservation of Niagara Falls, the Appalachian National Park, the Billboard campaign, etc., it is pretty well assured that the coming convention and conference will afford ample stimulus both for reflection and activity on the lines which will probably be suggested for new or continued service in a great and good cause, and one of growing importance.

e e e

Good Work for Florists and Nurserymen

There is possibly no more promising field at present for a campaign of education than that of the trees, for with the general public what knowledge it possesses is too superficial as a rule to even protect itself against the unscrupulous salesman, and it is therefore in large measure practically dependent upon the nurseryman for the information necessary to assure success in the growing of the trees after purchase. Herein lies a pretty strong suggestion for the nurseryman and florist who can if he wills it, through his local press and personal efforts, so improve the knowledge of the community that as a result his business will be largely increased and the development of his neighborhood not only encouraged but hastened. That this is a course of wisdom on the part of the nurseryman we have positive evidence before us from a Texas florist, and the good spirit in which, in this instance, the local press has co-operated in the matter, would lead to the conclusion that such information as the local nurseryman can give to his neighborhood through the columns of his local paper or papers, is as welcome to the wide-awake publishers as to the people, and the co-operation thus brought about is profitable to all concerned. As we suggested above practical information is what is really needed by the majority of purchasers of trees and shrubs, and no one is better qualified to give that information than the local nurseryman and florist; of course we are speaking of the ordinary property owner, who would in all probability cheerfully improve his home by shade trees and shrubbery had he sufficient confidence in himself to launch out on the proposition. Here's where the nurseryman comes in!

Indoor Attendance at the Small Parks

Some interesting figures are given in the latest report of the Chicago South Park Commissioners on the attendance in the Assembly Halls and Club Rooms of the Small Parks under their jurisdiction. In the Assembly Halls of the eight Small Parks having such halls, the total attendance for the year 1910 was 270,798; the highest being in February, 38,333, and the lowest in August, 3,608. This would not make a fair average for only in the three summer months did the attendance fall below 21,500. Ten of the small parks have Club Rooms, and the total attendance for them for the year 1910 was 65,580, the lowest being for August again, 2,500, and the highest in February, 9,859. This is a speaking argument in favor of the indoor features of the small park.

* * *

Community Mausoleums

The great showman Barnum often said he did not care what the papers said about his show, so long as they mentioned his name. That was advertising and advertising was what he was after. This may also be true of the promoters of the so-called community mausoleum proposition which is attracting so much attention in the Middle West. The commercializing of the care of the dead has naturally met with opposition, both from cemetery superintendents and monument dealers, and their objections have resulted in considerable newspaper discussion. A recent prospectus has been brought to our attention, in which very attractive inducements are being held out to prospective investors by the community mausoleum companies, and with such alluring propositions, it is not at all surprising that people of get-rich-quick temperament can be found to take them up. In reference, however, to such broad statements as to the number of mausoleums built and crypts sold, it may be left to residents in the localities where mausoleums have been erected to determine their accuracy. Their prophecy as to present methods of burial becoming in the near future, barbaric, borders on the ludicrous. The following are some of the figures, etc., given in the prospectus alluded to above:

"Mausoleums containing 1,000 crypts can be built for about \$80 a crypt or \$80,000. To this is to be added \$20,000 for perpetual maintenance, a lot and selling expense, which brings the gross cost of a mausoleum up to about \$120,000. Crypts in Chicago and other cities will sell for \$250; and private rooms containing ten crypts each for \$50,000 more, making gross sales of \$300,000 (more or less) for each mausoleum. Deducting the \$120,000 expense, leaves a net profit of \$180,000 on each mausoleum, which is 6 per cent on the capital stock of the company for every mausoleum of 1,000 crypts. * * * The company has already erected 300 mausoleums. Sixty-six of them contain core than 17,000 crypts, practically all of which have been sold. These are mostly in small towns whose aggregate population is 800,000, only about onethird that of Chicago and Cook County. * * * We shall advertise the mausoleum idea and it won't be long before burial in graves will be considered as barbaric and not to be thought of by any but the ignorant and indifferent."



RECENT PARK DEVELOPMENT IN PORTLAND

By J. R. Wetherbee, Park Commissioner and Chairman Civic Improvement League of Portland, Ore.

No one who has studied the geological formation of the Pacific Coast with

of this single State of Oregon. These are but a few of the startling riches



BIRD'S EYE VIEW OF PORTLAND FROM CITY PARK.

its present geographical features, and has taken into consideration the relation of these to centers of population can fail to note the location of the future commercial metropolis of the Pacific Coast.

A study of the park development of a great city must of necessity revolve around that city's future possibilities. Therefore, for the sake of a better understanding of the claims of our citizens in the line of park development, we may be pardoned for digressing a little to give a more concrete reason for what must be in the future.

Portland, the Rose City, is located on the only fresh water harbor that the Pacific Coast affords, at the junction of the two greatest rivers commercially west of the Mississippi and at the only water grade opening in that vast and beautiful mountain range which extends from Alaska to Mexico. When developed there will be 2,000 miles of inland waterways tributary to this single point, backed by 250,000 square miles of rich agricultural territory, with 165,000 acres of orchards already planted and one-sixth of all the standing timber in the United States within the boundary lines

tributary to this incomparable location for a great city.

It is axiomatic that agriculture is the basis of all wealth, and is necessary to the healthy life and development of a great community. In view of these facts, it must be evident that a great city is to nestle on the banks of the mighty Columbia, and the majestic Willamette, for here rail and sail meet, and nature smiles continuously at the cry of poverty. Here destiny has

fixed the dwelling place of a multitude.

Believing as we do that teeming millions will soon call this land of promise home, it is but the part of prudence and good business judgment that we now prepare for their oncoming. The wise man plans his house before he builds. So should a city look out for the future. Portland has always been conservatively forehanded and the conscientious men who served as her park commissioners in the years past were not short sighted nor neglectful of the future. They sought the best advice obtainable. Several years ago Olmsted Brothers, of Brookline, Mass., were employed to make a study of and lay out for Portland a system of parks and connecting boulevards. This was so ably done that succeeding park boards have followed the plans very closely. The confidence of the people in the future of their city impelled them to provide means, and therefore, a bond issue of \$1,000,000 was voted for the beginning of this great system. The present park board is carrying out these plans.

During the past year large areas of park property have been acquired. and boulevard development set on foot. So that today no city on the Coast is anticipating for the future to a better advantage than Portland.

The present year has seen several new areas developed. It is the policy



PLAY FESTIVAL IN ONE OF THE PORTLAND PLAY PARKS.

of the Park Board not only to buy for future generations, but to provide pleasure and recreation for the present. With this in mind, 1910 was the banner year in development work. Modern play features have been installed, apparatus, swimming pools, comfort stations and playgrounds have been provided. It is a recognized fact in all park work that supervision of the play of children is as essential as the supervision of school work. Therefore, seven directors have made the health and pleasure of children their business during the summer months.

One of the most complete playgrounds may be found in the newly acquired Sellwood Park. It is furnished with the most approved and up-to-date gymnasium apparatus, a magnificent dry land swimming pool with necessary dressing-rooms, wading pools, sand piles, play features for both large and small children, baseball field and an athletic track. One of the great advantages of these neighborhood parks is that the anxious parent knows where to find the boy or girl, full of life and ambition, and knows that they are under proper supervision.

In another section of the city may be found Peninsula Park, equally well equipped and supervised. Still farther away on the East Side is Columbia Park, one of Portland's small gems. Crossing the river to the West Side we find the North Parkway playgrounds teeming with happy children.

A trip to City Park finds still another center of child life development. These playgrounds are but forerunners of what is to come. It is the purpose of the Park Board to provide playgrounds with swimming pools in South Portland and Albina during the coming season. These districts are in great need of adequate play facilities, with proper provision for supervision.

A large amount of development work has been done in City Park, at the head of Washington street, in the Peninsula Park, Columbia Park and in Sellwood Park during the last year. Nineteen hundred and eleven has seen development work started in Ladd and Mount Tabor Parks. While it is impossible to carry on development work as fast as we would like, yet the work that is being done is a part of a definite plan for each section, and as years go by and the work continues our citizens can see the hand of the designer in this work. Probably the greatest need at pres-



SOME OF THE VIRGIN FOREST IN MACLEAY PARK, PORTLAND, ORE.

ent is the securing of a large acreage for a zoological park. The animals are now being tortured by close quarters in City Park. They should have large areas conducted so that they will be placed as near as possible in their natural habitat. The educational features of a "zoo" must not be overlooked and Portland should make ample provision for the animals.

The crowning glory of Portland's park system will be a magnificent system of connecting boulevards, both hillside and on the level. The beauties of our hills are the talk of all tourists and the vistas to be opened up by hillside development are bevond the possibilities of imagination. No other city is so favorably situated or can lend itself so easily to beautification. Contracts have been let for the Terwilliger boulevard in South Portland. It was hoped that a portion of this would be completed during 1910, but on account of unavoidable delay, due to the inability of the Park Board to acquire certain railroad land, is at present held in abeyance till this matter can be adjusted.

A drive along a well-finished boulevard 1,000 feet above the city, with snow-capped mountains in the distant view and magnificent rivers at one's feet, with the mild climate and balmy air of the City of Roses, would make

Portland famous the world over as one of nature's beauty spots, and it would in truth become the summer capital of America.

NATIONAL ASSOCIATION OF GARDENERS

The annual meeting of the National Association of Gardeners was held at Morristown, N. J., Oct. 27, with about 100 gardeners and florists, representing all parts of the country, in attendance. Addresses were made by J. K. M. L. Farquhar, of Boston, Mass., on "Gardeners' Opportunities"; and J. Otto Thilow, of Philadelphia, Pa., who spoke on raising the standard of gardeners and placing them on a higher plane in life. W. J. Stewart, of Boston, Mass., spoke on horticultural lines, and Charles H. Totty dwelt upon the national show of 1913. The election of officers resulted as follows:

T. W. Logan, president.

M. L. Tilliston, New York, first vice-president.

W. H. Rennie, Pasadena, Cal., second vice-president.

M. C. Evel, Madison, N. J., secre-tary.

F. Calvary, Mass., treasurer.

The report of the financial condition of the association was read and many new members were admitted to the organization.

STATE PARK IDEA MAKES RAPID GROWTH

By John Nolen, Landscape Architect, Cambridge, Mass.

State Parks, like other parks, have definite purposes to serve and there-Their fore definite requirements. main purpose is to refresh and strengthen and renew tired people, to fit them for the common round of daily life. National parks have a similar purpose, but on account of their limited number and location they are available only to persons living in certain sections or to the few people who can afford the time and money necessary for a long journey. The City Parks serve this purpose also, but it is only to a limited degree. In the first place, large cities alone can afford large parks and even then they are too small, as a rule, for broad scenic effects; secondly, cities are located for commercial, business, or transportation reasons and seldom possess invigorating climate or great natural features of special beauty or interest,-or, if they do, the demands of commerce are such, or are thought to be, that the preservation of these features is not considered practicable.

The requirements of State Parks may be conveniently summarized under five heads. (1) They should be large; otherwise they could not be used by great numbers of people without destruction fo the very qualities most essential to their purpose. On acount of the influence of topography, it is hardly practicable, nor is it necessary, to fix an acreage for State Parks; but, as a working basis, it may be said that it is desirable that they should contain at least five thousand acres,-ten thousand acres are even better. (2) State Parks should be accessible-not to the degree that City Parks are, but accessible by train or boat or vehicle within reasonable time and at reasonable expense. Accessibility, however, should not be interpreted too narrowly, nor should it be measured by present facilities alone. The establishment of a park in one section or another will inevitably lead to an increase of traveling accommodations, as will also the mere lapse of years, bringing with it an increased density of population. (3) The air and climate of sections within which State Parks are located should be salubrious, and the situation healthful. Especially should the climate of the summer months, the period that most people have for vacations, be agree-

able. In the course of years State Parks are likely to be more or less, visited at all seasons, as Nature offers a reward in every month to her visitors. But the emphasis for the present must be placed on the mid-summer season, spring and autumn. (4) The property for State Parks should be reasonable in cost. Cities average about a thousand dollars an acre for park land, but hope for a comprehensive system of State Parks must be founded on a lower cost. Except in the case of densely populated States, States that have waited too long before taking action, there is every prospect of securing the most suitable and fit land at almost nominal rates. The parks acquired by States so far have not averaged in cost much more than twenty-five dollars an acre. Seldom would a State be justified in paying an average of over a hundred dollars an acre for a tract of any considerable size. Not only should the first cost be low, but the property should be of such a character as to require relatively small expenditures for construction and maintenance. It should be a "natural" park, one of such intrinsic beauty as to require little outlay for improvements. (5) Finally, the site for a State Park should, above all, have a decidedly uncommon charm and beauty, a distinction among landscapes, an irresistible appeal to the Nature lover. Here there should be no room for doubt; for failure in this point means complete failure; and on no other point, nor on all other points together, can justification rest. State Parks must be unmistakably beautiful; they must present to the enjoyment of all some consistent, unspoiled type of landscape; they must offer freely the glory of lake or mountain, the picturesqueness of shore or bluff, the beauty of hill and vale.

At least half a dozen States have begun the acquisition and development of State Parks. Massachusetts, for example, awoke to its importance nearly a score of years ago. A body of public-spirited men then petitioned the legislature, stating that the seashores, river banks, the mountain tops, and almost all the finest parts of the natural beauty of Massachusetts, were possessed by private persons, whose private interests often dictated the destruction of this beau-

ty or at least the exclusion of the public from the enjoyment thereof. The inquiry inaugurated as a result of this petition is full of suggestion and warning to newer or more sparsely settled states. With reference to the ocean shore, for example, the Massachusetts agent found a great population on land hedged away from the beach and all conditions pointing to a time, not remote either, when nobody could walk by the sea in Massachusetts without the payment of a fee, as was formerly the case for a glimpse of Niagara. Resulting from this and somewhat similar movements, the State of Massachusetts has already acquired some large and valuable holdings, first through direct action of the state appropriating money for the purchase of park lands, secondly through state appointed commissions, and thirdly through the trustees of public reservations, a board created to receive and care for gifts of land to the state. The Massachusetts Trustees of Public Reservations now hold the following lands as State Parks: Virginia Woods, 20 acres; Goodwill Park, 88 acres; Rocky Narrows, 21 acres; Mount Ann Park, 50 acres; Governor Hutchinson's Field, 10 acres: Monument Mountain Reservation, 260 acres; The Pine Knoll, 6 acres; Petticoat Hill, 50 acres. In addition to these properties, Massachusetts possesses also the valuable mountain reservations under the control of the Wachusett and Greylock Commissions.

The State of Maine has made a beginning in the work of the Hancock County Trustees of Public Reservations. Dr. Charles W. Eliot has recently written the following interesting letter about what is virtually a State Park on Mt. Desert Island, Maine:

"The Hancock County Trustees of Public Reservations are incorporated by an act under the Maine Legislature, which grants them exemption from taxation on all lands held by them for the use of the public. They have no right of eminent domain, so that all their holdings have been obtained through gifts of land, or through purchases made with money contributed by public-spirited persons who desire to promote the objects of the corporation. The organization was copied from the Mass-

achusetts Trustees of Public Reservations, and the objects of the two bodies are the same.

"Although Hancock County includes a large area on the mainland, it is the Island of Mt. Desert which is the chief ornament and asset of the county; and it is upon this island that the Trustees of Public Reservations have acquired all the lands they now hold. They have already acquired large areas upon Green, Dry, and Newport Mountains, and several of the smaller hills which lie about them. It is the policy of the trustees to acquire the tops of hills and mountains and their steep slopes,particularly those which form the water-sheds of public supplies for the inhabited shores of the island. They do not acquire any lands which could be used either for habitation or cultivation, or any lands which could be reached by public water supplies, considering it for the public interest that all arable or habitable lands should be used commercially, and remain liable to taxation. The operations of the trustees have already been carried far enough to make it sure that Mt. Desert Island will remain a health and pleasure resort through centuries, its wild scenery and its safe water supplies being preserved and improved. No opposition whatever has arisen to the proceedings of the trustees and all the dwellers on the island hope that the trustees may acquire the greater part of the uninhabitable areas in the eastern half of the island and some of the finest spots in the western half."

Other reservations in the nature of State Parks have recently been made in New England but definite information with regard to them is not yet obtainable.

The achievements of some other states are equally encouraging. New York has a notable, even if incomplete and threatened, possession at Niagara Falls. It has a good park in the Adirondack Mountains, in Watkins Glen, and Stony Point, in the great gorge of the Genesee River, and in co-operation with New Jersey, an extremely useful reservation in the Palisades of the Hudson River, which, in the acceptance of the recent offer of Mrs. E. H. Harriman and others will be extended to include 25,000 acres or more, making it the largest and noblest of all the state parks and one of the finest public reservations in the world. Mrs. E. H. Harriman, in compliance with the wishes of her late husband, off-

ered the State of New York for a state park 10,000 acres of beautiful land on the Hudson near her home and a million dollars. To this munificent gift, John D. Rockefeller and J. Pierpont Morgan have added a half million dollars each; others have subscribed sums that will bring the total to over two and a half million dollars. These gifts have been accepted by the people of the State of New York, appropriating another two and a half million dollars, making five million dollars in all, and 10,000 acres of land for the extension of the Palisades Park. The proposal is magnificent in itself and illustrates the great appeal that state parks will make both to individuals of wealth and to the people of the states. Ex-Governor Hughes gave his hearty endorsement to this project and recommended the appropriation by the state of the sum asked for, the money to be provided by the issue of state bonds.

California, not content with the big national parks within its borders, has invested \$250,000 in a state park near Boulder Creek, thereby acquiring a sample of redwoods as they have been for 10,000 years and one which may be preserved for all time to come.

Michigan possesses in the Mackinac Island State Park one of the great historical and scenic parks of the United States. A resort of importance for over 100 years and today with the care given, it is fast becoming known throughout the world. The Mackinac Island State Park contains 1,041 acres of which 500 are covered with hardwood, 400 acres spruce, cedar, hemlock and other soft woods, and the balance cleared land. Old Fort Mackinac built in 1780 with its 35 buildings comprises part of the park. Throughout the park are drives, paths and trails, all of which are kept in the best of condition. Minnesota, Kansas, and one or two other states, I believe, have shown regard for some of their natural resources by making public reservations of beautiful and interesting scenery.

But in state parks the real lead, so far as policy is concerned, must be accorded to Wisconsin. This is not surprising, for the people of that Commonwealth have a reputation for sound and progressive ideas and an unusual devotion to measures which promise to promote the common welfare. Three years ago, in accordance with the action of the state legislature, the governor appointed a state park board of three members. That

board with its landscape adviser made a systematic examination of Wisconsin's resources in scenery, with the well-defined purpose of securing for the people what was best and most distinctive. The report was presented to the legislature and a liberal appropriation made to enable the state park board to begin the acquisition of land.

Some 3,800 acres in Door County, Wisconsin, including eight miles of shore line with a number of deep water harbors, have already been acquired. It is a wild and as yet unspoiled tract, with alternating interests of woodland and cliff, bay and land. The Board has also begun the acquisition of Devil's Lake and the forest land around it to the extent of 5,000 or 6,000 acres. Devil's Lake meets adequately all the requirements of State Parks. It possesses also scientific interest-geological, archaeological, botanical—to a degree that can scarcely be duplicated in Wisconsin.

To the Door County State Park and Devils Lake, Wisconsin will propably add later the Dells of the Wisconsin River, in many respects the most characteristic and precious possession of the State in the form of natural scenery, and a tract on the Mississippi River near the historic city of Prairie du Chien. The Park on the Mississippi, if finally selected, will probably include about 2,700 acres, 1,720 acres of high land on the ridge and 1,000 acres virtually level with the river.

These four sites—Eagle's Bluff in Door County, Devil's Lake, The Dells of the Wisconsin, and the Mississippi River reservation—are not the only oncs in Wisconsin suitable for State Parks. Other sites, such as Thunder Mountain, Blue Mounds and Platte Mounds, are all worthy of consideration. But the four named by the State Park Board are peculiarly fit for immediate acquisition and development.

The justification of State Parks may be summed up as follows: (1) They would, in many cases, in common with the forest reservations, the great economic value of which is now unquestioned, preserve and protect just so much more of the woodland of the State and the stream flow dependent upon it. They would provide the best method of preserving places of historical and scientific interest. (3) They would give an economic return from tourists and visitors. Providing for tourist travel has become a large and important

business, and it is steadily increasing. In a single State like New Hampshire it exceeds ten million dollars a year. The Mackinac Island State Park in Michigan cost little to secure; yet it is now valued at two million dollars, and is visited annually by two hundred thousand persons. The figures for Niagara Falls are even more impressive. 15,000,000 visitors have been admitted. The Niagara Reservation has been a profitable investment for the State, and has afforded a practical demonstration in America of the principle long acknowledged in Europe, that the preservation of the beautiful "pays." (4) State Parks would be the means of preserving, protecting, and appropriately improving places of uncommon and character-

istic beauty. Even forest reservations-useful and indispensable as they are-will not answer this purpose. Land for forests is selected on a different principle and is afterwards developed and maintained in a manner radically different from that called for by parks. (5) Finally, these parks would make as no other agency can, adequate and permanent provision for wholesome outdoor recreation and pleasure. If it is right for States to spend millions of dollars on charitable and penal institutions, as they do, made necessary in part at least by unfavorable physical and social conditions, is it not wise and good to spend something on preventive measures which would make such institutions less necessary? No one questions nowadays that simple recreation in the open air amid beautiful natural surroundings contributes to physical and moral health, to a saner and happier life.

The beauty of Nature is a State resource: it deserves to be conserved. One method of doing this, in many cases the most available and logical, is by the establishment of State Parks. It may reasonably be expected that the action of Massachusetts, New York, Michigan, California, Wisconsin, and other States, already so well justified by results, will be followed by still others, until every State in the Union has a comprehensive, well-balanced system of parks, embracing its most valuable and characteristic natural scenic and historic resources.

INTERESTING PERENNIAL BORDER IN BOSTON PARK

One of the most interesting landscape features of the great Franklin Park in Boston is the new perennial border which Superintendent J. A. Pettigrew has established in a sheltered nook near Seaver street.

This interesting planting winds along a pleasantly sinuous course for a distance of some twelve or fifteen hundred feet. Its general shape is that of a long bow or crescent; its edges, however, jut out here and there into little capes or retire into shallow bays, and while one end begins simply and without flourish, the other sweeps round into a large curve before coming to a full stop.

Facing southward, the back of the garden is well sheltered by the low trees, mostly pin oaks, which form a screen towards Seaver street and the north, while a varied line of dogwoods, viburnums, bush honeysuckles and other shrubs not only further shut



NEW PERENNIAL BORDER IN FRANKLIN PARK, BOSTON.

off damaging winds from that direction, but form a background agreeable to the eye, against which to project the flower pictures of the border.

These flower pictures are composed of a great variety of plants covering the season from April and May when blooming begins with the appearance of daffodils, scillas, crocuses, snowdrops and such venturesome things as open their petals at that early date, to the flowers of late autumn. For the most part they are of the class known as hardy perennials, phloxes, larkspurs, foxgloves, native asters, etc.: not a few of them were quite familiar to our grandmothers and great-grandmothers; there is, however, a liberal sprinkling throughout of "annuals," like verbenas, zinnias, nasturtiums, cosmos, china asters, etc., giving brilliancy and variety to the display all through the season.

The border is not exclusively a perennial planting, for much of its color



PERENNIAL BORDER, LAWN AND TREES, FRANKLIN PARK, BOSTON,

effect is attained by the use of Countess of Elsmere petunias, cannas, antirrhinums, gladioli, pentstemons, dahlias, cosmos, salvias, poppies, verbenas and other annual material. As the perennial plantations attain their growth the annual fillers will be proportionately lessened.

Among the interesting plants in the border is a fine collection of hardy asters, including all the novelties from foreign sources.

This attractive bit of planting, with its host of old-time flowering things beloved by the early New Englanders—bleeding heart, larkspur, horse balm, fox glove, hollyhocks, poppies, canterbury bells and the like—will eventually form part of a much larger feature soon to be realized here in Franklin Park, namely, the new zoological garden, of which probably everyone has heard something and of which it is now a forerunner, but will in time

no doubt become a harmonious and fitting detail.

A very pretty view of it as a whole may be had from the ridge to the south, which in time it is also proposed to plant in some suitable manner with the design of completing the sheltered character of the location, while the floor of the little hollow between the two may also at a later day be utilized for an attractive aquatic garden.

STANDARDIZING MUNICIPAL PARK REPORTS

Read Before American Association of Park Superintendents by E. T. Mische, Superintendent of Parks, Portland, Ore.

There is need of standardizing municipal park reports. American municipalities display a woeful lack of co-operation. Each city goes its own pace its own way, and ofttimes that way is extravagant, fool-hardy and subversive of the community's best interests.

It is opportune to view some of the activities in which our municipalities are engaged and to study how their efforts may be made more efficient.

Parks are, if anything, sociological and economic factors in city life. Moreover they are so-called directly unproductive properties and for that reason are often the object of unwise discrimination. How often does it occur that one administration will reverse the policy of its predecessor and always on the most plausible pretext. A careful, conservative administration will be followed by another brandishing needful improvements, extension or local pride as a reason for change; or an active progressive one will be followed by another who propose retrenchment, business or sanity as the main motive of reversing policies. And yet compelling conviction rarely goes home to the public, and why? Citizens generally lack information and until accurate information can be supplied as to details of each department and of their significance in the co-ordinated branches of a municipal government we can expect that some phases of the government will be dealt with in a manner unfortunate, to say the least.

In the interest of real progress and of park development especially is it desirable that reports on general and specific municipal affairs should be made periodically and on occasion these reports should be harmonized for all cities? General annual reports

should give figures of population, assets and indebtedness, revenues and expenditures. Following these in further detail would be departmental reports showing the budget appropriations and other resources, expenditures classified in sufficient detail to permit of intelligent analysis and showing just what has been accomplished with each outlay. The need of standardizing municipal park reports is that it makes for a popular understanding of work accomplished or of work left undone which should have been done; properly followed up it supplies an efficiency of method that is a great assistant in administration; it permits of periodic accounting. It is very probable that efficient municipal government will only be feasible and be recognizable as such when our systems of municipal accounting are of special excellence. Reports of this sort furnish a basis for comparison of the work going on in the various cities and though at first they are apt to be very imperfect they should and doubtless will with time offer an opportunity for many valuable comparisons.

We have yet to learn and appreciate the degree of economy and efficiency in vogue in European cities where administrators are retained solely for their ability, and that ability is much more intelligently determinable than with us.

There is no intention to make an invidious comparison nor to make any derogatory charges against officials—every city is virtually in the same boat. At present each community works out its own salvation in its own way and as a result we have for instance a duplication of experimental work that is wasteful. Consider road construction; macadam is perhaps the most general in use for park drives—the old cities are

aware of the disintegration following the advent of automobiles. Millions have been spent in the construction of the drives and of a sudden an arch enemy appears. Those with the existing drives seek means of conserving them. Patented preparations, surface metals, emulsons, new binders in the foundations and a host of injurious trials are being made at enormous cost, all for the purpose of protecting and improving the drives, and how many of these experiments have been tried and found unsatisfactory and yet the same course is adopted by another city just as if it had never been tried?

Similarly, Chicago has within the past few years expended some five million dollars on a system of small parks and playgrounds which puts her in the van of all her sisters, here and abroad,

Yet her experience teaches that some of the gymnasia facilities are inadequate and that for less than \$30,000 a satisfactory gymnasium cannot be installed. These facts should be common knowledge and henceforth the mistakes of Chicago should be corrected in the construction of similar works in other cities and Chicago herself should be subject to learning from her sisters more of the very matters in which she leads.

To harmonize the park work in the different cities the report upon it should be harmonized and that done each report will be an assistant and guide to each other city. Toward that end Portland will in its ensuing report adopt the general method now in vogue at Minneapolis and Kansas City—not that these are perfect or even closely approaching perfection but rather that their tendency is in the right direction and even in their present form they have comparative value.

GOOD CONCRETE GUTTERS FOR PARK ROADS

Every park or cemetery superintendent who has made any use of concrete construction knows that the difference between good and bad concrete work lies entirely in the selection of the ingredients and the strict adherence to careful methods at every stage of the work. The Kansas City Park Commission's methods of awarding contracts for concrete gutters is worthy of careful study both as to the actual work of construction and as to the detailed and rigid manner of specification.

The type of gutter used in the Kansas City parks costs, by contract, from 43c to 60c, with an average of about 50c per lineal foot. It is constructed on a foundation of six inches cinders, with crushed limestone ranging from 3/4 inch in its greatest dimension to 1/4 inch in its least dimension, in the proportion of one part Portland cement, two parts Kaw River sand, and five parts crushed limestone. Immediately on completion of the gutter the surface is thoroughly swept with a cement grout, composed of one part cement, and two parts clean limestone screenings, from 1/8 inch to 1/4 inch, with enough Kaw River sand to fill voids.

The contractor is required to sign an iron-clad, carefully drawn contract, guarantee, and maintenance bond, and adhere strictly to the following specifications:

SPECIFICATIONS FOR

Constructing and guaranteeing for a period of three (3) years concrete gutter on...... side of..... from to

The work embraced in this contract shall be begun withindays after this contract binds and takes effect and shall bedays after this prosecuted regularly and uninterruptedly thereafter (unless the said Board of Park Commissioners directs otherwise in writing), with such force as to secure on or before braced in this contract within the time above specified, an amount equal to the sum of fifteen dollars (\$15.00) per day for each and every day thereafter until such completion, shall be deducted as liquidated damages for such breach of this contract from the amount of the final estimate of such work.

And no extension of the time hereinbefore provided for the completion of said work, granted by sald third party at the request or upon the petition of the Contractor, shall be held or taken as a walver of the right to deduct the sum of fifteen dollars (\$15,00) per day as liquidated damages aforesaid for each and every day sald contract shall re-main uncompleted after the time herein provided for completion of said work, unless such waiver be expressly made by resolution of the Board of Park Commissioners at the time such extension is made,

gutter shall be constructed to the forms and dimensions given on the plans

heretofore approved by said Board of Park Commissioners on the.....

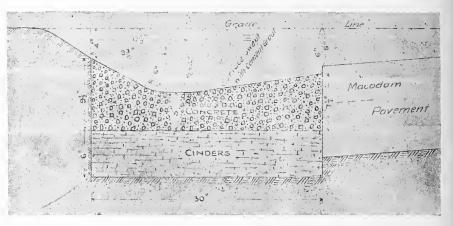
The dimensions must conform to the general dimensions shown on the cross-section of gutter on said plans heretofore approved and be as follows: The gutter to be not less than thirty (30) inches wide in extreme width, not less than nine and one-half (91/2) inches thick on the outer edge, not less than seven and one-half (71/2) inches thick on the inner edge, and not less than five (5) inches thick in the trough of the gutter.

Two (2) parts Kaw River sand:

Five (5) parts crushed limestone.

This mess should be moulded into the forms provided and set in place by the Contractor, and shall be rammed until all interstices are thoroughly filled.

The stone shall be of sound, hard lime-stone, clean and free from all dust and dirt and other foreign material, and shall be crushed to an uniform size, the greatest diameter of which shall not exceed three-fourths (%) of an inch and be not less than one-fourth (¼) of an inch, and be



CROSS SECTION OF CONCRETE GUTTER IN KANSAS CITY PARKS.

The material used in the construction of the gutter shall be concrete composed of crushed limestone and the best Portland cement of..brand, together a certain portion of clean, coarse Kaw River sand.

All material shall be approved by the Board of Park Commissioners.

The Contractor shall state in his proposal brand of cement he proposes and all the material rejected in the course of the work must be immediately removed therefrom.

The same brand of cement and the same character of stone shall be used throughout the work.

Should the exigencies of the work require a change in the brand of cement the Board Park Commissioners will designate the change of brand to be used, for which there shall be no extra compensation.

All excavations or filling, or other preparation of the kind necessary to the performance of this contract, shall be done by the Contractor as a part of such work, and he shall assume all responsibility for any defective work of such sub-grade.

Foundation. Upon the sub-grade when built of a character such as will warrant Contractor to guarantee his work, as hereinafter specified, there shall be placed a foundation of cinders not less than six (6) inches in depth after having been thoroughly flooded and rammed. The cinders shall be free from earth or other foreign materials.

All forms shall be made from first-class lumber and securely fastened in place, and thoroughly tested for line and grade, and plastered with mortar such as is used in wearing course surface, previous to the

putting in of concrete.

Gutter. After the foundation of cinders has been finished the gutter shall be con-structed in the best workmanlike manner of concrete composed of crushed limestone, clean, coarse Kaw River sand of uniform grain and free from foreign substances, and Portland cement of the brand specified in the proposal and approved by the Board of Park Commissioners, and shall have two (2) dry and two (2) wet mixtures in the proportions as follows, according to measure:

One (1) part Portland cement;

acceptable to the Board of Park Commissioners.

Particular care must be taken that the concrete is well rammed and consolidated, and be entirely satisfactory to the Board of Park Commissioners.

Immediately after the completion of the concrete gutter, and not more than thirty (30) minutes thereafter, the surface of the gutter shall be thoroughly swept with a cement grout composed of one (1) part cement, above described, and two (2) parts of clean limestone screenings, from one-eighth (%) inch to one-fourth (%) inch with the dust screened out, and enough Kaw River sand to fill voids. Enough grout shall be used to thoroughly fill all interstices, and to bring the surface of the gut-ter to a uniform, even finish. The sand and cement shall be thoroughly mixed dry, and then enough water added to make a thin mortar or grout.

care must be taken to have the surface lines true to the line of grade and cross-section, as indicated upon the plans.

gutter shall be constructed to the given by the Board of Park Commissioners.

The Contractor must protect the line and grade stakes, and will be held responsible for any defective work occasioned by his negligence in this regard. The gutter shall be laid in continuous

stones, each section to be about six (6) feet in length, as may be ordered, each stone to be entirely separated from the neighboring stones at the joints by steel templets threesixteenths (3-16) of an inch thick, and of same length, and depth as stone is wide and thick, so that any one stone may be removed from the work without injury to itself or to the adjacent stones.

The joints shall be smooth, straight, as small as practicable, shall be plumb throughout their depth and at right angles small

to the line of the work.

Any spalling or splitting off whatever of the finished surface of the gutter, either at the joints or in the body of the stone, will be sufficient cause for rejection, and any rejected stone must be removed and replaced with a new one immediately.

Concluded on p. XI.

PARK NEWS.

By a decision of the State Supreme Court of Washington, which declared the election of May 3, 1910, to be valid, the Park Commissioners of Spokane will have \$1,000,000 at their disposal for park purposes as soon as the bonds can be issued. The park system now embraces some 800 acres, but the authorities have promised to place a park within ten minutes' walk of every home in Spokane.

The Chicago City Plan Commission has outlined a scheme whereby the city's park area can be increased 100 acres a year and an immense parkway eventually built extending from 22d street on the south to Ohio street on the north. All would be practically free of cost, as the material for the filling in would come from the subway and other building excavations. The chairman, Charles H. Wacker, has called attention to the immense amount of dredging which will be done by the sanitary district in the next few years. He estimates that 4,600,000 cu. ft. of waste material is annual output of Chicago, and Ald. Long has made definite calculations that the sweepings and ordinary excavations from work in Chicago in a single year would build twenty-three acres of land on the lake front, allowing it to extend fourteen feet below the water and seven feet above.

Mexico City, Mexico, is falling into line on the park question, and if Director of Works de la Barra has his way, within the next five years the city will have a thousand acres in suburban parks.

Quincy, Ill., the city which through its Boulevard and Park Association has set a pace for civic park progress, has recently added a tract of ten and a half acres to its North End parkage, and the board of directors of the association are considering additions to South Park, Indian Mounds, and North Side system. The board had a busy session. Attention has been directed to the reckless driving in the parks and driveways, and it may result in an ordinance passing to check the dangerous nuisance.

The New York City Board of Estimate recently voted to acquire two seaside parks, one at Dreamland, Coney Island, and the other at Rockaway Beach, the combined cost of the two to be not more than \$2,225,000. Of this total it is proposed to spend

\$1,225,000 for 250 acres of land at Rockaway Beach. The other \$1,000,000 is to be spent for seven acres of the Dreamland property. The Rockaway Beach property is to be bought by private sale, that at Coney Island by condemnation. This action of the board is the initial step toward the expenditure of some \$5,000,000 for seaside parks.

New York City has had a strike of night ash-cart men on its hands. The men have protested against night work of that kind and to force a decision in their favor struck. Mayor Gaynor and Street Cleaning Commissioner Edwards have been firm in their refusal to be coerced, and considerable public inconvenience resulted.

The Women's Civic League of Baraboo, Wis., has opened up again vigorously after the summer vacation. Preparations have been made for a mass meeting to be held this month, and some public speaker well acquainted with civic improvement plans and details will probably address the meeting; at any rate the zeal and energy with which the ladies of the pretty Wisconsin town are moving, and practically taking hold of all features of civic betterment, goes to show what can be accomplished even in the preliminaries of a campaign to improve. The cooperation of the local press in the work is spreading the knowledge of what the League desires to accomplish, as well as its far-reaching organization and departments of activity. It appears to have no rivals in the scope of work it has undertaken nor the spirit to meet the problems facing it.

Among the various park improvements that Mr. F. Shearer, city superintendent of Los Angeles, Cal., suggests is the establishment of more small squares and plazas throughout the city, for the use of those who wish to walk from their homes to an attractive spot for daily recreation and rest. At present Mr. Shearer is having plans prepared for the proposed Arroya Seco parkway, which promises, if it materializes, to be superior to any other parkway on the Pacific Coast. He is also urging a special election to vote a bond issue

for a large amount so as to bring Los Angeles' park system up to date.

The offer of Mrs. Mina Robinson, of South Scranton, Pa., to sell Mountain Lake and a twenty-four-acre park site to the city for \$2,500 has been officially approved. The offer is conditioned on the stipulation of the city to improve the plot for park purposes and to name it Robinson Park, in honor of her two deceased sons.

Port Jefferson, Long Island, N. Y., is planning to acquire ten acres of land on its water front for park purposes.

Sanitary bubble fountains are coming into general use. Our illustration shows one in one of the parks of Kansas City, Mo. It is made of concrete under the direction of the engineering department. Sid J. Hare snapped his camera just as the fearless little fellow was in the act of



BUBBLE FOUNTAIN IN USE IN KANSAS CITY PARK.

quenching his thirst. He is hanging on with hands and feet, but he's getting there with the true Kansas City spirit.

Referring to a request for \$152,000 to employ additional laborers for the parks, Charles B. Stover, park commissioner of Manhattan and Richmond, New York, complained that he is being forced to use old and infirm men, who get the same pay and do only half as much work as men employed by the street cleaning department. "Why is it," he asked, "that Commissioner Edwards has a different list from which to pick his laborers?" It might be quoted that "Echo answers: Politics."

A resolution requesting the Oregon congressional delegation, the Secre-

tary of the Interior and the Forestry Service to secure an appropriation for the improvement of the Crater Lake National Park, was adopted recently by the Commercial Club of Medford, Ore.

Central Park, Davenport, Ia., is now Vander Veer Park, the name having been changed by the Board of Park Commissioners as a mark of respect and recognition of the untiring efforts of the late A. W. Vander Veer, member of the Board, in the cause of Davenport's parks.

The Park Board of Omaha, Neb., has received the annual donation of \$10,000 from Mrs. Salina Cornish for use in Carter Park, but as Mrs. Cornish's suggestions are for improving the Iowa side of that park, the Board may have to return the donation.

Taxpayers of the town of Oyster Bay, Long Island, N. Y., were to have voted on Nov. 7 on a bond issue of \$100,000 to establish a public park and playground in the village of Oyster Bay. The proposed park will comprise 25 acres of land adjoining the railroad station at Oyster Bay village, and it has a fine water frontage.

Officers of the State Conservation Association of Pennsylvania have recently inspected a large tract of land in Clarion, Ells, Jefferson and adjoining counties, which it is planned to secure for a state park. The next legislature will be urged to pass the necessary legislation to carry out the project.

Provided the city will make certain stipulated improvements the Girard Trust Co., trustees for the heirs of the late Wister Morris, has offered twenty acres of land, known as Morris Park, in the Overbrook section, to the city of Philadelphia. An ordinance has been presented in Select Council calling upon the city to accept the gift.

The Japanese are preparing to create their first national park, after the idea of the American reserves, around their sacred mountain, Fuji Yama. It is the Mecca of the Japanese and its sides are dotted with rest houses, where the pilgrims may find shelter and food.

Richmond, Va., is being aroused to the construction of a park-to-park boulevard, from the William Byrd Park to the Joseph Bryan Park.

Former Gov. Henry A. Buchtel, chancellor of Denver University, proposes to give that city ten acres of land in University Park on condition

that the plot be made into a park and be maintained by the city.

The commissioners of the Palisades Interstate Park announce the following gifts of land for park purposes: From Dr. James Douglas, of New York City, the site of the historic Fort Lee, situated on the top of the cliffs at Fort Lee, and immediately adjoining the Interstate Park lands under the Palisades. From Stephen Rowe Bradley, Mary T. Bradley, Augusta B. Chapman and William C. Bradley, all of Nyack, N. Y., the heirs of the late Stephen Rowe Bradley, a tract of 212 acres of land in Rockland county, New York, to be held by the commissioners for the purposes of a natural park and to be known as Rockland Park. This land is situated on the easterly side of South Mountain and commands a magnificent view of the Hudson river.

With the \$200,000 of bonds recently voted by the people of Pittsburgh, Pa., the Works department proposes to erect a number of shelter houses in the parks, to construct Lake Elizabeth in West Park, and to carry out some other permanent improvements.

NEW PARKS

E. F. A. Reinisch has completed plans which he has placed in the hands of the park committee of the Commercial Club of Topeka, Kan., for the beautifying of Lakewood Park, the gift of W. J. Rickenbacher to the city.

The West Chicago Park Commissioners are providing for more small parks in their district. Among the latest additions is a four-acre tract at Good, South Aberdeen and South May streets.

Bonaparte, Ia., has recently dedicated a new public park.

Mr. A. D. DeLand has offered to give the city of Sheboygan, Wis., a plat of land of over five acres, on condition that the city improve it for a public park. It is a most desirable block bordering on Lake Michigan.

Brooklyn, N. Y., seems assured that it will secure the proposed public playground and Memorial Park on the site of the Battle of Long Island. The site is the two city blocks, now chiefly vacant land, bounded by Third and Fifth streets and Fourth and Fifth avenues. Suggestion has been made that part of the tract be used for a public playground and the rest as a monumenatl reservation or memorial park to commemorate the Battle of Long Island, fought on August 27, 1776.

Another public playgrounds site has been selected in Haverhill, Mass., by the Park Commission, and it has the approval of the Playgrounds Association. It is located on Primrose street.

Mayor Thompson of Detroit, Mich., recently executed a good piece of business when he purchased a site for a new ten-acre park for that city, without taking chances on losing the opportunity through official red tape. The new property has a frontage of 600 feet on Jefferson avenue and a similar frontage on the water. Detroit is short on park lands.

City Marshal Wells of Plains. Mont., proposes to donate four acres of land to that town for park purposes. The Commercial Club has been looking for a site for a park and playgrounds for some time. The tract adjoins the town limits on the north.

PUBLISHER'S NOTES

Dust laying and mud-killing, perennial problems with park and cemetery superintendents, would hardly appear a seasonable topic at this time of the year, yet Mr. S. G. Howe, inventor of scientific methods for constructing, treating and repairing roads, whose years of experience qualify him to speak authoritatively on the subject, states that winter is the most desirable season for putting roads in perfect condition by the use of chlorides in combination with other material. Some very convincing arguments in favor of these methods of treating roadways have been lished by the Howe Chemical Road Co., 519 Moffett Building, Detroit, Mich., and may be had on request. The application of deliquescent chlorides, a by-product in the making of salt, has been found very effective, both as a dust layer and a mud killer on public and private roads in Detroit, Mich., as well as in other cities. In an address before the Philadelphia convention of the Association of American Cemetery Superintendents Mr. Howe favored the application of these materials in liquid, in preference to the granulated form, by reason of its being more readily absorbed and preserved. In the granulated or dry form, it is claimed that unless there is moisture in the air, or it is applied artificially, the material will dry out and lose its value as a dust-layer or road binder.

Every user of lawn mowers will be interested in reading the handsomely illustrated forty-third annual catalogue of The Philadelphia Lawn Mower Co., 3101-3109 Chestnut St., Philadelphia, Pa. Various styles of hand and horse lawn mowers, lawn trimmers, grass collectors and sweepers are illustrated and described. The cover is printed in two colors, yellow and blue, the colors of the city of Philadelphia, and the embossed dates 1869-1912 brings out in bold relief the number of years "Philadelphia" lawn mowers have been on the mar-

ket.



SOME SHRUBS SUITABLE FOR THE SOUTHWEST

Address Delivered by J. B. Baker Before Texas Nursermen's Association

Three years ago I planted a bed of shrubs in my back yard to hide my barn lot and wood pile. The conditions for growth were all unfavorable, so that by the end of the long, dry summer nearly everything was dead. There was one shrub, however, that flourished beautifully. It was the Russian olive. It is now, after three of the severest seasons ever known to Texas, a splendid specimen, fifteen feet high, ten feet across and covered with a rich dense growth of beautiful silvery foliage that attracts everybody's attention. In the Spring the thousands of little vellow blossoms give out a delightful odor that is not surpassed by the sweet olive blossoms or the American Beauty rose. Another shrub that lived and flourished was the chilopsis or flowering willow.

The second season I replanted my bed with some of the very hardiest of the tall growing shrubs, namely the Parkinsonia aculeata, the Sophora japonica and Mimosa julibrissin. The Parkinsonia was injured by the freeze of last winter and I had to cut it back more than half way, but it came out quickly and now has new branches on it eight feet long and still growing. The pleasing fresh green of the bark and leaves, the peculiar shape of the leaves, being twelve to fifteen inches long and a quarter of an inch wide, the profusion of pretty golden blossoms which cover the tree, altogether make it unusually interesting. The Sophora japonica with its rich dark green foliage and large wisteria like blossoms and its healthy vigorous growth, makes it a fit companion for the olive, chilopsis and Parkinsonia. The mimosa could not keep up with the race, and has made but poor growth, though in the nursery where cultivated it is a vigorous grower.

Last spring I planted another bed of shrubs in another place where the conditions were even more unfavorable for growth than in the first bed referred to. In this bed I needed a few tall growing shrubs and many medium and low growing kinds, Every nurseryman will understand how unfavorable the conditions were. when I say that most of the spireas, philadelphus, deutzias, ligustrums, weigelas and even the altheas, red buds and crepe myrtles died during the extreme heat and drouth that prevailed this summer. Yet right in this very bed I have a fine bank of shrubbery that has furnished a wealth of foliage and bloom all the season. In addition to several plants of Russian olives, chilopsis and Parkinsonia. there were several plants of poinciana Gilliesii, vitex agnus-castus and koelreuteria paniculata and a few crepe myrtles.

The vitex is a strong healthy grower and a good bloomer and is worthy to rank with the larger shrubs mentioned in the first bed, yet the feature of the second bed was decidedly a clump of the poinciana. The foliage was full and luxurious and as graceful and feathery as a fern and the plants while growing rapidly have been covered almost continuously with strikingly beautiful flowers of crimson and gold. This is by no means a new shrub, except in name. It is found cultivated more or less all over Texas, but usually without a name, though it has several local names, such as poponax, acacia Texana, bird of paradise and other names that I cannot recall just now. The nurserymen of California declare it is a poinciana and that is doubtless what it will be called. At any rate it is one of the best of all round flowering shrubs I know of. For any place and for drouthy hard conditions I know of nothing to equal it. It stands among shrubs, where the Umbrella China does among shade trees. If the soil be so poor and hard and the weather so hot and dry that all other shade trees die, the China will go right on growing just as if the conditions were exactly what it delighted in. So it is with the poinciana. I have never seen it fail to do well anywhere.

There are other shrubs that should be included in this list of extremely hardy ones, though I do not give them the same comparative test. They are the tamarix and robinias. The old salt cedar that grows on the sands of the sea shore and the drifting sands of West Texas is a tamarix. The old variety has been so improved as to make it valuable for foliage and flower, as for instance the variety Japonica plumosa is strikingly handsome in form and foliage, white hispida estivales is covered nearly all summer with bright pink blossoms as pretty as the heather of England and Scotland. The robinias comprise species from small shrubs like the hispida rosea to large trees like the black locust, and many of them produce a wealth of bloom from pure white to the various shades of pink, that for delicate and dainty tints are not equalled by any other shrubs I know of. The above named plants to which might be added cydonia and some species of the rhus, are such as I would recommend for droughty seasons or regions and should be largely used wherever shrubs are planted, but of course they do not by any means represent the complete list for Texas planting. The crepe myrtle, in its four or five colors, is perhaps the best shrub for Texas. but it must be grown as a shrub and not as a tree. When allowed to grow, especially in central and south Texas, it becomes a small tree, with hard wood, bare stems, a paucity of foliage and small clusters of flowers, but when it is cut back to the ground every year or two and thus kept as a shrub it has about all the good qualities that could be asked for.

The altheas also deserve special mention. Just now, (Sept. 9th) our blocks of altheas are the showiest things in the shrubbery department.

The shrub most extensively planted is the spirea Van Houttei. It is the best of the low growing shrubs and is extensively used as borders for beds or masses of other shrubs. Other shrubs that are standards and generally well known for their hardiness and adaptability to our climate are the buddleias, caryopteris, deutzias, forsythias, bush honeysuckles, Judas tree, lilacs, philadelphus, ligustrums and pomegranates. All of these have stood the drouth well, wherever cultivated. In our experiments this season with a number of kinds not generally planted in the Southwest, we are pleased with the ceanothus Americanus, laurus tinus, hypericum moserianum, and sambucus, but the shrub that interested us most is a hardy shrubby salvia, producing a profusion of scarlet blossoms very similar to the salvia splendens. It is a neat growing plant, not quite so large as the spirea Van Houttei and will prove very valuable for bordering large beds. It has been blooming from the time we set it out in April until now, and will doubtless continue until frost. I am watching it with a great deal of interest.

Planters generally in the Southwest have not learned to use shrubs to the best advantage. Occasionally an individual specimen may be planted by itself to good advantage, but as a rule they should be grown in beds or groups. Their best use is not so much to show the beauty of their flowers or foliage as such, but more for the general effect obtained by combining plants of different heights, shapes and habits, as well as color of foliage and flowers of the various shrubs.

To the landscape architect, shrubs form one of his most valuable assets.

Without them he could not complete the beautiful effects produced by the proper blending of foliage and flowers. It is easy to find the reason why shrubs have not been more generally planted in Texas. They have often been sold by agents, who knew nothing of their habits and requirements and more than this, many of our park and other large plantings are being done by men wholly ignorant of the names and nature of shrubs. often they send away to North Carolina, Ohio or some other place for shrubs totally unsuited to our conditions and climate. This is disheartening and it is the duty and privilege of the nurserymen of the Southwest to disseminate accurate knowledge, that the public may understand what to plant in a dry climate and what in a wet, what will thrive best in the shade and what in the sunshine.

METHODS OF NEW JERSEY TREE COMMISSIONS

From an Address by A. T. Hastings, Jr., City Forester of the Jersey City Shade Tree Commission

The original shade tree act in New Jersey was passed by both the assembly and senate in February, 1893. Through the efforts of the then mayor of Orange, Lawrence T. Fell, Gov. Werts signed the bill on March 28, 1893. Mayor Fell, who was heartily in favor of the Shade Tree Commission, and F. W. Kelsey, who is at present a nurseryman with headquarters on Broadway, New York City, both members of the committee which drafted the original act, desired very much that Orange establish the first commission in this state, but for some reason it was not organized and Orange remains today without the benefits of such a commission. Passaic was the first city to take advantage of the new law and through the efforts of the commission formed there many lessons were taught other cities how to carry out municipal shade tree work. East Orange and Newark soon followed Passaic's example. Today there are thirty cities and towns in New Jersey that have a commission, and many more are planning to organize commissions.

Amendments to the original act were passed from time to time. Unforeseen difficulties arose that demanded legislative action and in order to establish commissions in some cities an amendment became necessary. After many years of struggling in Jersey City an amendment was

passed giving the Board of Finance the power to authorize the mayor to appoint a commission. Under the original act it was the governing board of the Board of Aldermen, that had that power, but as the board did not seem anxious to adopt the act the friends of the commission secured the above mentioned amendment, which was the political end of the commission as far as Jersey City is concerned. I feel, however, that credit should be given former Mayor Fagan, Pastor Heindel, Dr. Ullamor Aleen, August Koven and Walter Gorman, as well as the various civic societies, for their untiring efforts to establish the commission in Jersey City.

Mayor Wittpenn, in 1908, created the commission appointing as commissioners Messrs. Richardson, who has since ably filled the president's chair, Pope and Conrad, the latter two later succeeded by Messrs. Tompkins and Morrison. The Court of Errors and Appeals, in 1909, in handing down a decision on the Civil Service Law, came near dealing a death blow to the commission as the court decreed the legislature has no power to grant away its own powers and it is the legislature and not city boards that can grant power to organize new municipal boards. This gave an opportunity for the enemies of the commission to get busy but Mayor Wittpenn, who is a great friend of the commission, went

to Trenton during the legislative session of 1910 and succeeded in inducing the legislature to enact a new law correcting the former defects. Only a few days ago it was stated that the New Jersey Law Journal had discovered some more defects in shade tree laws and that the commission of this city was a de facto board. It seems, however, that the Law Journal overlooked the 1910 law and that our commission will exist for a while longer. Of the final outcome of all the struggles to organize and maintain shade tree commissions in this state there can be but little doubt. The citizens of thirty cities or towns have now had a chance to see actual benefits derived from commissions and it is doubtful indeed if a serious check can be given to this growing movement for better care of street trees in cities. A permanent organization was formed to be ready at any time to foster and assist shade tree commissions throughout the state.

I will now briefly state the methods of operations by our commission and also give a few of their purposes.

The planting of new trees naturally enough comes first. Early in the spring of each year the commission selects streets to be planted. The intention of the commission to plant these streets is then advertised in the Jersey Journal and the Hudson County observer for five days. A specific

meeting of the commission is mentioned in this notice of intention at which meeting the commission listens and acts on objections to planting. The objections that are most liable to hold good are interference with business and the cutting of cement sidewalks. I do not mean by this that all objections of this nature hold good. The next step is the selection of trees. Norway maples, Oriental planes, and American elms are chiefly used as they are the leaders of suitable street trees. Others that are used are some varieties of the poplar, the ginkgo, and the locust, with occasionally a few oaks. Before the planting is done a space of ground where the tree is to be planted is dug up for about 4 ft. by 4 ft. and 3 ft. deep, the stone removed and manure and fertilizer added. The tree when planted is protected by a six foot wire guard and a 21/2 by 21/2 by 8 ft. chestnut stake. The cost of tree and planting and guards is charged directly to abutting property and is placed upon the annual tax bill. This cost is about \$3.00, but will vary from year to year as the price of trees at the nursery varies. Street trees are two inches in diameter at the ground. Besides this planting the commission plants on written request from anyone. In replying to these requests many trees of larger caliper than the regular two inch street tree are planted. Trees costing from \$10 to \$30 have been planted. It is surprising to note how the orders for these larger trees increase each year. The cost of these trees is paid directly to the commission. The money thus received is de-

posited with the city treasurer who credits the commission with it.

The planting of all city parks is also done by the commission. Altogether the commission has planted 3,736 trees on 41 streets, and 523 in the parks. This does not, of course, include the shrubbery and flowers planted. The ground covered by these 3,736 trees can better be realized by saying that at the average distance of 30 feet which they are planted would cover a distance of 21 miles. The past season the commission has planted close to 2,500 new trees. All trees planted by the commission are fully guaranteed, and if they die are replaced free. They are cared for from year to year at no cost to property owners.

The care of street trees is an important branch of the commission's work. Trimming, spraying, cementing and removing is all done gratis on application to the commission. A systematic scheme of the trimming of all street trees is the desire of the commission but funds are not available to place a large force at work to accomplish this. For this reason the commission limits themselves almost entirely to the performing of requested work.

The cementing of cavities in trees is an important factor as many large trees can in this way be saved whereas if left untreated they would soon become dangerous. This treatment consists of the removal of all decayed portions and the filling of the cavity thus formed with concrete. Some twenty-five trees have been treated in this way during the past summer.

The spraying of all trees in the city

at the proper time is perhaps the most sought for of all the work of the commission. Each year the commission adds new apparatus for this work and it will not be many years before every tree in the city can be sprayed at the proper time and the raid of the caterpillars be severely checked.

The cars of the city parks and the construction of new parks falls to the lot of the Shade Tree Commission. From plans drawn by Landscape Architect John T. Withers work has been commenced on L. J. Gordon, Bayside, and Mary Benson Parks. Two small triangular plots have been parked by the commission. At the junction of Baldwin and Summit avenues, a small triangular plot has been transformed into a beauty spot. This has been named the Catheryn A. Pope Triangle in honor of Mrs. Catheryn Pope, who during her useful later life devoted much attention to the needs of the poor. At the junction of Tonnele, Pavonia and Garrison avenues a similar plot of ground has been developed and what was a barren rocky piece of land is now a beauty spot. This has been named the Cornelius Brett Triangle. Of the many virtues of this gentleman I need say nothing. Both of these plots were developed at a cost of less than \$400 each, and I venture to say that no one would deny that this improvement has added hundreds of dollars to the value of adjacent property. The maintenance of city parks is quite a task requiring considerable outlay of money. Each year the commission will improve all city parks as far as possible and be kept worthy of the name "Park."

THE SUN DIAL AND ITS GARDEN SETTING

By Mary H. Northend

When our first Colonists came to the new country, they brought with them the memories of the beautiful gardens of England and Holland, and of their sun-dials inscribed with many a quaint and suggestive motto. Later, when the soil yielded fruits to the willing toiler, came the making of gardens and placing of sun-dials.

The Psalmist was levied upon for inscriptions, favorite ones being "Oh, remember how short my time is;" "Put not off from day to day;" "Man is like a thing of naught, his time passeth away like a shadow."

Queen Alexandra's dial in the garden at Sandringham bears the inscription:



BORDERING OF BOX AROUND A SUN DIAL.



A SUN DIAL ON THE LAWN IN THE ROGERS GARDEN.

"Let others tell of storms and showers;

I only count your happy hours."

Henry Van Dyke contributes the following beautiful sentiment:

"Time is

Too slow for those who wait,
Too swift for those who fear,
Too long for those who grieve.
To short for those who rejoice,
But for those who love
Time is eternity."

As early as the year 300 of the Christian era, dials were in use in Italy, whose people, with the inventive genius which they have bequeathed to their descendants, excelled in dialmaking, a cross-shaped form being peculiar to them. In the thirteenth century a compass was added and the dial was a portable one.

On the cathedral of Geneva is a beautiful carved figure of an angel, holding a dial. Carved figures holding dials are a common feature of cathedrals on the Continent.

One of the oldest English examples of sun-dials is a vertical one, over the door of Kirkdale Church, Rydale, and is semi-circular in shape. While not dated, it is believed to have been put in place during Edward the Confessor's reign. It bears this motto: "This is the day's sun maker at every hour, and Hayward made me and Brand the Priest."

At Holyrood Castle is a historic dial bearing the royal arms, the thistle and the monograms of Charles the First and the French Henriette Marie. A sun-dial which has been in constant use since 1690, is in the garden at Hampton Court, at the end of Queen Mary's Bower, which blooms every spring with lilac, thorn and laburnum.

On the dial of the same date at Oxford is this motto:

"A moment—mark how small the space

The dial shows upon its face; Yet waste but one and you will see Of how great moment it may be."

That dials were in use in this country long before the Revolution is shown by the number of them found in Virginia, two of them connected with the family of our first president. The sun-dial which formerly stood in the garden of Mary Washington, the President's mother, at Fredericksburg, now is to be found in the same town, but on different grounds-those of Mr. Darwell. A dial-face of metal, ten inches in diameter, which was in place before the entrance door of Mount Vernon, in Washington's day. was given to Mr. William F. Havemeyer, Jr., of New York, by Mr. Custis. At Kenmore, is the dial in the

garden of Betty Washington, the president's sister.

One sees, in the same state, now and then, a dial in an old-fashioned garden, or on the front of a court house, or church, but they are few and far between.

It is sometimes thought that only a garden on a formal and very large scale affords a dignified setting for a dial, but we are finding out that even the small, unpretentious garden can give room and proper surroundings to a dial which is in keeping with its surroundings. The Italian form of garden requires perhaps a more elaborate dial and a more artificial setting, while a less pretentious one is often more satisfactorily placed in the sweet old-fashioned surroundings of English or American gardens.

A sun-dial may be as costly as one's purse will allow, or it may be had for twenty dollars or less, if one buys it of composition, ready-made, or if one of the family is clever enough to make it the expense is trifling, as often wood for the pedestal is in the shed or field stones close at hand.

Harmony with its surroundings should be considered in choosing the design and material, the pedestal being really the part open to ornamentation. A pedestal of carved bronze or marble is seen to best effect in an exposed position in the formally-laid out garden, sometimes on a terrace or a slight elevation of ground, or at the crossing of several paths.

But the old-fashioned garden filled with masses—not too closely trained —of larkspur, hollyhock, Canterbury bells, spice-pinks and the other old sweet flowers, are a fitting background for a simpler dial, a Colonial effect,



DIAL MARKING CROSS WALKS AND BACKED BY PERENNIAL BORDER.

and often this pedestal is overgrown with vines and half concealed by low shrubs. One hardly needs to add that it should always be placed where the sun can strike it.

The pedestal should be placed at a height suited to the average person, not too high nor too low.

Another extremely interesting one is of the armillary sphere design, and is set in a greensward, in front of the great white steps which lead to the stately home of Mrs. Mahlon D. Spaulding, Pride's Crossing, Mass.

Kneeling figures are occasionally seen among pretentious surroundings. One such, which is very unusual, is that of the figure of a negro and known as "The Moor." It stands now on the Thames Embankment, London, in the gardens of the Inner Temple.

Of the two kinds of dials—the horizontal and the perpendicular—the latter is not so often seen.

A dial must be absolutely level, and at is best to set it by a spirit level. Although not now depended upon for a timekeeper, it must be given all the opportunities to fulfill its mission.

Some of the elaborate pedestals one finds on the Continent and which are

sometimes copied by Americans are supported by carved lions or dolphins. The Japanese temple pillars, when fitted with an appropriate dial, make good standards, but they must correspond.

A sun-dial should always stand in such a position as to focus attention upon it; it is for the time being the only object in view, and from that is derived much of its impressiveness.

An instance of this is a dial on an estate in Connecticut. The simple lines of standard and pedestal stand out in bold relief on a green lawn in front of the arched entrance.

Along the North Shore of Massachusetts are beautiful gardens with all manner of accessories, including many fine examples of sun-dials. One notably fine one is on the estate of Mr. Thomas M. McKee, of Beverly Farms. This pedestal, which is most elaborately carved, stands at the right of the house in a plot of lawn between four flower beds. At the left is the great terrace with great pots filled with shrubs, and over the beautiful stone railing one gets an extensive view of the fine grounds.

The sun-dial at the famous estate of Mr. T. Jefferson Coolidge at Mag-

nolia, is set in a circle of grass, while directly in front is the walk between the garden beds leading up to some steps and a marble seat. From this a beautiful view is had of the garden of which this dial is a striking feature, or turning around, from the porch one looks out into a wilderness of trees and shrubs and brilliant flowers.

The Rogers garden in Danvers, Mass., has a simple and delicately conceived dial encircled by borders of flowers, inside of which are flowering shrubs and beyond the trees which are the glory of this fine estate.

Many of the dials on these beautiful estates rely for a setting on the many old and new fashioned flowers which from early spring to late autumn, produce a succession of blooms. One of these has its flat round base apparently set into a low flowerbed, while a bordering of box edges the circle, and outside that again are more flowers, growing almost up to the sides of the house.

Roses give a beautiful setting to a dial, and sometimes glimpses of a simple pillar are caught sight of through the shrubbery which surrounds it, not too closely however to shut out the charming effect of light and shade.

COMMON VS. SCIENTIFIC NAMES OF FLOWERS

There is an unmistakable inclination on the part of the flower loving public to drop the old fashioned names of flowers and use the names given them by botanists and professional florists. The old idea that English names, however meaningless, were more poetic and, so to speak, more affectionate than Latin ones, may be to a certain extent true but it is a truth which rests mainly upon habit. Edelweiss, for example, has a foreign sound in English mouths. If these had begun by calling it Leontopodium, that name would be as pleasant to hear as the German for noble white. Everybody nowadays speaks familiarly of Gladiolus, Lantana, Begonia and scores of other common plants, as one does of Rose, Lily and Violet. To the real lover of plants, as well as to the systematic botanist, the Latin names sound as sweetly as the English. There has been no little superficial gush written about the old names which have come down to us through the changing speech of the old English people, names which had no meaning to them beyond the mere sound. In some cases they have, unquestionably, a certain prettiness. "But I am willing says Prof. C. S. Sargent, to say that the Latin names are, in most instances, as euphonious, as, and in many cases more so, than the English ones. The meaning of the English names, in very many instances, originates in their reputed medicinal properties, not from any poetic associations among the English peasantry.

I give a few examples of the common and scientific names:

Marigold: from Mary Cowles, Ang. Sax., meaning marsh, horse, gowl—Calendula.

Mullein: French, moleine, scab in cattle-Verbascum.

Columbine: Latin, columba, a pigeon—Aquilegia.

Cowslip: Flemish, kousloppe, hose flap—Primula.

Motherwort: from supposed medicinal qualities—Leonurus.

Maiden: a prefix to several plants; not love meanings, but they were supposed to have medicinal effects.

Pink: Dutch, old word for Whits-untide—Dianthus.

Rose: like the Latin—Rosa. Lily: like the Latin—Lilium. Violet: like the Latin—Viola.

Pansy: from the French, pensée—

Daisy: Day's-eye—Bellis. Flower de luce, Fleur de lis,

French, fleur de Louis—Iris. Lay-lock, Lilac—Syringa.

Candytuft—Iberis.

Honeysuckle-Lonicera.

Primrose: a vulgarization of the French primerole, prime-rolles--Primula.

Lady's Smock: in England, from the white flowers in spring—Cardamine.

Cuckoo-buds: which blossomed when the cuckoo came—Ranunculus.

All of these Latin names are as pleasant to say as the English ones. A study of the derivation of the old English names deprives most of them of all the sentiment with which time and association have clothed them. The truth is, that what we are familiar with we become fond of, and our children and grand-children will associate with the Latin names, now used familiarly, all of the poetry and sentimentality which we and our progenitors have associated with the old English ones, embalmed in poetry and romance. Emerson's lines to the Rhodora have more tenderness and beauty than if he had called it a Swamp Pink."

ANSWERED ASKED a n d

An exchange of experience on practical matters by our readers. You are invited to contribute questions and answers to this department.

Paint for Iron Fence and Gates.

What kind of paint is best on iron gates and what color is most suitable? -E. D., S. C.

Regarding the best kind of paint to be used on outside iron work, we have considerable experimenting along this line for a great many years, and we must confess that there is no paint made that will last indefinitely. Iron gates and fencing of any kind should be painted at least every two years, if they are to be kept in firstclass condition. As to the kind of paint, there are a number of very good brands which we could recommend, such as Dixon's Black Graphite or Chas. Mosers' Black Rust Proof paint. We ourselves, however, prefer to use lamp black mixed with boiled linseed oil, believing it to be the most satisfactory, owing to the smooth, hard finish obtainable, of a lasting quality. A first coat of red lead is desirable in order to give the best results, but "black" is the most durable color that can be used. If colors are preferred, would recommend Dixon's green paint.

STEWART IRON WORKS Co. Cincinnati, O.

Concrete Mixers.

Edw. G. Carter, Superintendent Chicago, Oak Woods Cemetery, "How many superintendents use concrete mixers or know that their foundation labor bills might be reduced 60 per cent by so doing?" Here is a suggestion that cemetery superintendents will find well worth following up. Comments or suggestions as to how to obtain the best results in building foundations will be welcome.

Grass Around Trees.

Is grass around trees (maple) in avenue injurious to growth of trees? —Е. D., S. C.

Certainly not. The grass to a certain extent conserves the moisture in the ground, and saves the surface of the earth from the drying influences of sun and wind; and when it rains it catches and holds the water, giving it a chance to percolate into the soil rather than run off from it. So much for the utility, now let us look to appearances. An avenue of trees is a beautiful sight, and this beauty is vastly enhanced when the trees are stretched along on grassy sward

as in our city boulevards or parks. Bare ground is far from inviting. And unless it is soft and unfastened on the surface just as the farmer stirreth the soil in his fields, it becomes hard and baked and decidedly disadvantageous to the welfare of the trees. To cultivate the ground under such circumstances would be ridiculous, far better mulch it. But greatly better and more beautiful is to grow grass under the trees. Should the trees appear starved the meaning is-poor preparation before planting.

WM. FALCONER. Supt. Allegheny Ceme-

Pittsburgh. tery,

Telephone Wires in Cables.

A year or two ago I made some inquiries about trees and electric wires and your reply was of considerable assistance. Now I have another: The city police and fire wires must, they say, go on the streets, and as the trees interfere they want to cut, which, at best, would be only a temporary expedient. I suggested wooden tubes to carry the wires through the trees, but the fire chief says these would get soaked in a rain and render the wires useless. Is there a tube made for this purpose that is practicable or have you any other suggestion to make? There are only two or three wires. One telephone company has started the plan of putting the poles and wires in the alleys and running a cable on the avenues where the trees conflict.—B. D. M., Wis.

The practice of using cables for carrying telephone wires through trees in public streets, or parks, is becoming quite common. Of course this cannot be done economically where there are only four or five wires, but where there are more than ten wires it is considered better practice to use cable even at the expense of taking down the old wires, if the interference of trees is great.

The telephone companies are no longer in the habit of sending out vandals with saws and hatchets to hack up the trees, possibly because the public is becoming more tolerant, and does not demand absurdly expensive construction in places where it is not called for.

F. H. REED.

Editor "Telephony," Chicago.

The Telephone Review, published by the New York Telephone Co., gives in its issue of September, 1910, the following interesting facts about the telephone cable construction in New York City and vicinity:

"Let us take a look at the distributing system in the Borough of Manhattan, New York City. This system is a very satisfactory one to all concerned, and is perhaps the highest type of modern telephone con-struction that can be found anywhere in the world today. Starting at the upper end of the Island, we find neat pole lines on the streets with small telephone cables attached thereto. These cables form the distributing plant for that portion of the town which is sparsely developed and look the same today as they did when erected several years ago, and will look the same for many years to come, as the cables contain spare pairs for growth. This construction is ideal for newly developed sections of a town, for residential districts with detached houses, or built-up sections where the telephone velopment is comparatively small. Frequent terminal boxes are spliced to these cables and make it possible to connect individual rubber insulated wires that run to each telephone with the wires in the cable without opening the lead sheath and exposing the paper insulation. These terminals also ren-der it possible to make changes from time to time that the service requires, such as changes in the class of service, i. e., from party line to direct, and vice versa.

"A little further downtown, where the houses, apartments and business places are built in solid blocks, no telephone pole lines are found on the street. Anyone walking along the streets there would assume that all wires were underground. This is not the case, however, as the distributing cables here are just as much above ground as in the first case mentioned above. Small cables are brought out from the main feeder cables in the street and run underground into some building, from where they are brought out above ground and run along the back fences

or rear walls as the conditions require.
"Going still further downtown, the large business and office buildings are reached. No wires are visible in the streets, but conditions are almost identical with those just described. The distributing cables here are in the buildings themselves, but are not underground. Take the built-up block further uptown, referred to above, with a horizontal distributing cable along the back fences and stand it on end; condense it into one building, and you have the telephone system of a modern office building.
"Thus we see that throughout New York

City the distributing plant is above ground, but the greatly desired object of getting the wires out of sight has, in general, been ac-complished. If the general public could be made to realize these facts and would change their motto to: Put the wires out of sight, instead of: 'Put the wires under-ground,' and would give the Telephone Company co-operation instead of opposition, much more rapid progress could in the accomplishment of the result desired

by all concerned.
"The progress so far made has, in general, been accomplished not by the help of the public, but in spite of it. An illustration of this fact is the work done in that section of Brooklyn known as Flatbush. Trying to force medicine down a baby's mouth to save its life does not begin to tell the Flatbush. A better, more up-to-date and satisfactory telephone plant cannot be found and in any residential section of any city in the world than there is in Flatbush today, but, oh! the years of discouraging labor battle to accomplish it!

"It has been the aim of the Plant Department of this Company for a number of years to get as many telephone wires out of sight as possible. When this cannot be done, every effort is being made to simplify the overhead construction.



ART AND ABERRATION IN CEMETERY MONUMENTS

By Albert Woodard

The first and dominating thought in monument design should be modesty. The hallowed environment of "God's Acre" does not invite sensationalism in its architecture. Has it never occurred to the reader that the plainer monuments, simply inscribed, have touched the real chord of sympathy, when extravagantly elaborate and ostentatious structures have awakened little interest beyond a speculation as to their probable cost? The office of the monument is a melancholy one. Like a powerful story it should express its message in simple and dignified terms. Literally, the ideal monument should be a prayer in granite. The keynote of repose in the sarcophagus type is a low, broad proportion, coupled with a temperate fitness in the use of ornament, and irreproachable workmanship in the treatment of all surfaces and angles. Figure 12 is illustrative of the effectiveness of this quiet, horizontal style as a peace-promoting element among narrow, stilted erections. Medieval letters and decorations add a distinctive charm to this memorial.

The selection of granite has much to do with the success of a design. Even in the standard granites, Barre for example, there is so wide a range of color and texture, that the crowning effect of carving is often defeated by the injudicious selection of stock.

Manufacturers often sacrifice, through misguided thrift, the opportunity for producing best results in carving by the use of light Barre, some grades of which are peculiarly lifeless in delicate carving or fine mouldings, and only adapted to large, plain masses such as mausoleums, entrances, pergolas, shafts, etc. The immaterial difference in cost between light, and medium or dark stock should not be considered, if good carving and satisfied customers are desired. All pieces composing a monument should be carefully shaded to uniformity.

The darker granites, especially those of coarser structure, as Quincy, Missouri and all colored granites, should be used chiefly in all polished effects. We may except very bold carving like heavy capitals, Celtic ornament, etc. As imposing examples of results attainable in polished treatment, we present the Whitney, Bartholomae and Bordner monuments, the first named showing the adaptability of polished Quincy granite to the reception of applied bronze work, the more or less harsh contrast common in the association of bronze with the lighter hammered granites being absent. Note how restfully the bronze decoration on the Whitney monument blends with its polished surfaces, while that adorning the face of its sister memorial, the Furman, more aggressive on the hammered background, does not so readily dissolve itself in the serenely classic outlines preserved in these beautiful stelae. As most bronzes ultimately blacken, it is a question if brass or gilt bronze is not more desirable for decorating light granite and marble. The Bordner sarcophagus, a fairly faithful reproduction of the Scipio tomb, is remarkable because of the eccentrically extravagant outlay of time and skill necessary in polishing the







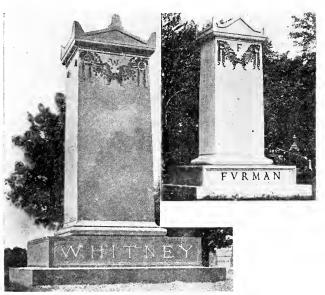
THREE FINE TYPES OF MODERN CELTIC CROSS MEMORIALS,

rosettes and other minute details of the die. After this prodigal expenditure of labor, that it should be desecrated by modern "headed block" letters in the family name is unfortunate. Only deeply incised Roman letters should be used in inscribing monuments of classical design.

If raised letters be insisted upon, bronze Roman letters may be applied at a very trifling excess in cost above stone-cut letters.

The growth of interest in the Celtic cross memorial is happily widening in America. These stones, as well as other forms of Runic and Celtic art always supply a distinctive note in a huddle of hackneyed and mediocre monuments. Celtic ornament is contemporary with the "Bronze Age" in England. The conversion of Britain to Christianity, extending over two hundred years, generally influenced native arts. The earliest development of Celtic art is traced to Irish manuscript of the eighth century, appearing in stone in the ninth, tenth and eleventh centuries. In Gothic architecture, the Norman and Early English periods are rich in Celtic detail of its later phase.

Figure 13 illustrates a cross of stately proportions and



POLISHED AND HAMMERED MONUMENTS OF THE "STELE" TYPE WITH BRONZE LETTERING.

typical involute decorations worked out with infinite skill and fidelity to ancient examples.

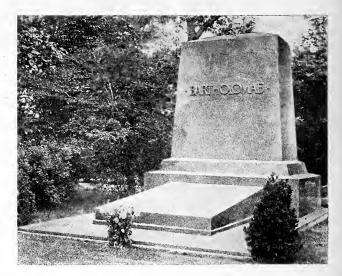
Characteristic atmosphere abounds in the exceptionally pure specimen of Celtic treatment shown in Figure 14. The interlacements and bosses are in perfect scale, and the semi-circular projections inside the nimbus add an historic value.

Figure 15 is an altogether interesting cross, although radically different in configuration and detail from Celtic prototypes.

Apparently a modern German influence has operated in the design and decoration of this cross.

These cross designs should represent ideal memorials to those English and Milesian Americans who desire to venerate their mother country in an enduring tribute.

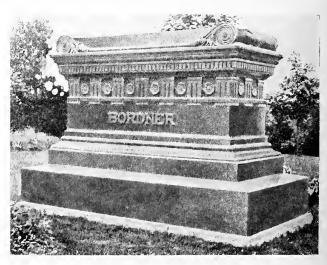
The Hawgood monument is an eloquent example of "not how cheaply but how good" a monument may be made, being one of a series of sarcophagi treated similarly as to form, but varying as to the style of the richly decorative frieze at the base of die, all reflecting the individualistic skill of their creator, the late Joseph Carabelli.



FINE EFFECT IN ALL-POLISHED QUINCY GRANITE, WITH BRONZE LETTERS.

Perhaps the only criticism the captious might find in this design would be the use of the cyma mould at the base of the die concavity. Mounted upon a base of flat projections, the "wash" being given a rough granular or "atmospheric" surface, excepting an inch margin finely hammered, at its edge, this rose-girt die would more effectively come into its own. (See illustration.) As contrasting specimens of concaved monuments we present Figures 16 and 17, both of which we feel compelled to catalogue as grave offenses. The first, our four-footed friend with the five-foot name, qualifies in the bath tub class. The feet (forgetting the family name) are the prevailing features, but do not affiliate with the die, or the "dollar-down" furniture carving that hobbles them. Judging from the proportions of the name letters, it was not the intention of the owner to take any chance on the liability of posterity to get past without reading the label. Claw-footed sarcophagi of history seem to have demanded a lavish incrustation of Renaissance carving.

The dies of Figures 16 and 17 show unhappy and unarchitectural contours, the flare at the top of the same being a peace-disturbing element, conducive to beetling brow and high waist line effects, neither of which is desirable in good monument design.



GOOD COPY OF FAMOUS TOMB OF SCIPIO, WITH INAPPROPRIATE LETTERING.

Where the concavity of the die is extended to the base the result is not gratifying unless the continuity of the curve is unbroken.

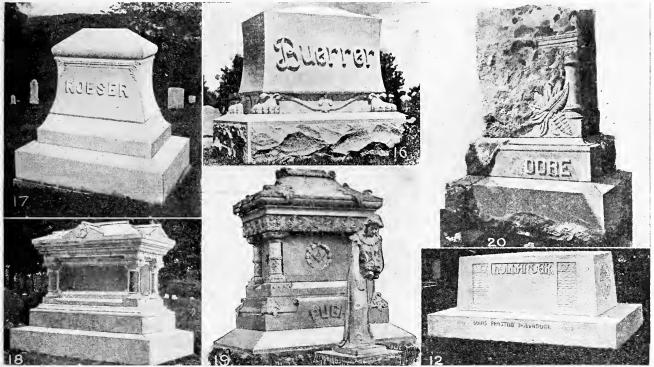
Upon Figure 18 a trade journal confers the rather optimistic title of "Old Reliable," excusing the pseudonym with the statement that these creations are always salable. While hesitating to controvert history, the writer may mention an instance wherein one of these ancient specimens of hybridized Gothic did not "move lively," which may be interesting in that it provides another eminently fitting appellation for the species.

The dealer who owned all of this particular O. R. and was sorry, became imbued, one day, with a hunch that he had landed a buyer for it. His prospective victim, a dame from rural parts, shied at the antiquity at first sight, however, and backing to the friendly shelter of Opus No. 76 with the urn, waved her umbrella indicatively at the Great Sacrifice, exclaiming, "That's one of them Methuselems; none of them for mine." So "Methuselem," the

ing from a mass of rock, variants of Figure 20, expressing the sentiment that the hand of the sculptor had been arrested before the completion of the noble work, a novelty in its early youth, is now so frequent an occurrence as to cause the beholder to feel, after he has confronted the fifty-seventh variation of what is now a vice, quite reconciled to the conclusion that the original excavator should have been arrested before beginning to sculp. Let us hope that this style is fast approaching the moribund stage.

These specimens, selected at random from various sources, index the general complexion of American memorial work. That there is great need of a very great reform in our memorial design, an issue of greater importance than the fixing of prices, or adjustment of freight rates, must be clear to all, and all branches of the profession should be willing to unite in a crusade for better work.

Surely a majority of the associated dealers will concur in the opinion voiced at the monument dealers' convention,



Figs. 16 and 17: Unhappy Architectural Contours, with "High Waist-Line" Effects.
Fig. 18: "Old Reliable," a popular architectural horror, sometimes known as "Old Methusalem," "Frosty Faithful" and other aliases
Fig. 19: "A Flamboyant Medley of Popular Decorative Tunes; Good Workmanship Badly Expended."
Fig. 20: "One of the fifty-seven varieties" of a much abused type of fancy, mixed decoration.
Fig. 12: A "Quiet Peace-Promoting Element" among a riot of impure, flamboyant, decorative forms.

good lady's alias for mausoleum, abides with the dealer as a permanent code signal for his "Frosty Faithful."

Figure 19, the Pugh pagoda, presents a scene of unbridled activity. Here, indeed, has the designer scorned the trammels of art precedent and handed us a flamboyant medley of popular tunes, from Richardson Romanesque to carpenter's classic. The slim lady in front, specializing in the Memory stunt, doesn't seem quite attached to her job, and would doubtless be glad to quaff the Lethean draught and forget it for a spell. The Romanesque has "treed" scrambly acanthus leaves of the Renaissance on the roof corners, while pocket editions of the same face the semi-cardinals from the second base. The good workmanship in this monument justifies a regret that it was not expended toward a more seemly result.

The sometimes clumsy, sometimes weak column emerg-

that high-brow lectures on art and architecture with stereopticon illumination should fill an important part in the
programs of the meetings of the craft. Shout this from
the housetops, but should it not also be argued and urged
that a system of historical art study would be found a
profitable preparatory step among the members to the end
that these talks would be more clearly understood? This
study should have its reward in the daily work. To be
able to designate your design by some identification other
than the generic term of "column job" should appeal to
those least prejudiced.

In the past there has been an incomprehensible inclination among monument makers to criticise the building architect in monumental work. As a rule, however, the criticism is seemingly more the result of unwarranted jealousy by the former than from any fault in the archi-



"NOT HOW CHEAP, BUT HOW GOOD."

tect's design. This attitude may account, in some measure, for the architect's indifference to the welfare of the general monumental trade. It is reasonable, if not polite, to venture the deduction that a very large percentage of the profession has not felt it seriously necessary that it should know all the Euclid of mortuary art, when it may have mirror-finished and diamond-dyed multiples of air-cooled "winners" in design thrust upon it with every order for a stock-job.

With the establishment of an estimate censorship at Barre, why is it not also practicable to inaugurate a Bureau of Design, presided over by an architect of ability? These



SUGGESTION FOR A DIFFERENT BASE TREATMENT

offices might be merged and operated by a single executive system. Such a plan might be effective in eliminating bad stock-work, the bane of the cemetery, as it would supply the manufacturers with original designs, individual in character, and correct in style and proportion, for use in producing that ever-blooming but not ever-beautiful pot-boiler, the stock monument.

These might be designed along classic lines, admitting of modifications to suit the taste and pocket of the buyer. A system of distribution might be arranged, so that many monuments of a given design would not be shipped to the same district.

COMBINED CHAPEL, RECEIVING VAULT and OFFICE

The mortuary chapel, receiving vault and superintendent's office recently erected at Riverside cemetery, Appleton, Wis., by the Riverside Cemetry Association of that city, is an interesting and substantial combination structure. The cost of the building was \$12,753. It is old English Gothic in style and it is well adapted to the requirements of the cemetery. In the center rises a square tower, facing the west, and flanked on either side by a loggia. The loggia to the north connects with the receiving vault, which has a flat roof; the loggia south of the tower connects with a like structure in which are the superintendent's office and toilet rooms. The tower forms the vestibule and belfry of the chapel, which extends eastward from the tower and is not visible from the west, or front, side of the building.

The loggias have low-pitched roofs of green Spanish tile and each has six arches, three to the east, three to the west. The center arches on each side are open to the ground and allow carriages to drive through the loggia and permit the passengers to alight from the vehicles under cover, a convenience much appreciated.

The central tower, the vault and office buildings and the chapel and the arches of the loggias are of rough stone. The buttresses are capped with cut stone and the window sills are of the same material. The flat roofs of the tower and vaults and office are of concrete, with spouts of the same material to shed the water.

The floors throughout the structure are of concrete and the woodwork has an antique stain that harmonizes splendidly with the architecture. The vault is entirely of concrete. Reinforced concrete shelves serve as receptacles for the caskets. The capacity of the vault is sixty large caskets. It is 29 feet long, 16 feet 10 inches wide. The roof is equipped

with the most modern ventilating devices. The office building is of the same size as the vault.

The chapel is 43 feet 10 inches long and 35 feet wide. The curve of the vaulted ceiling, the dark woodwork, the plain, roughly-plastered wall and arched doorways are in accord with the old Gothic style of the structure, and give an effect of simple dignity. The pews and the chairs and stand for the clergyman's book on the platform are of dark wood, with Gothic ornamentation. The chapel has a seating capacity of 200. It is heated by a hot-air furnace and electrically lighted.



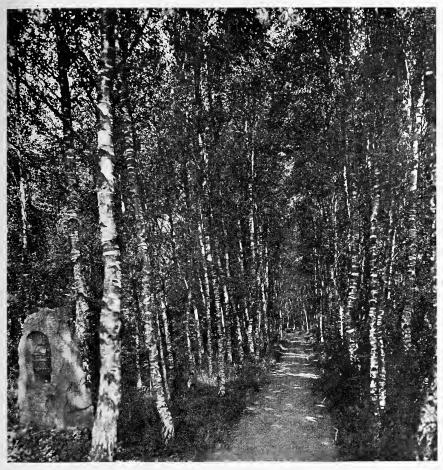
CHAPEL, RECEIVING VAULT, AND OFFICE, RIVERSIDE CEMETERY, APPLETON, WIS.

MODERN LANDSCAPE CEMETERIES IN GERMANY

German cemeteries do not, as a rule, present landscape features that are of interest to the modern American cemetery developed on the lawn plan idea, but the famous Ohlsdorf Cemetery

must be taken into account the character of the soil and the configuration and elevation of the plot.

All these modest requirements should be combined with as much po-



PATH THROUGH BIRCH GROVE, OHLSDORF CEMETERY. A Section Reserved for Urns and Memorials to Those Cremated.

in Hamburg, and the Forest Cemetery in Munich are rarely modern examples and have some landscape effects that are, to say the least, interesting and suggestive, if not always directly in accord with the best American practice.

The modern cemetery in Germany, and indeed, elsewhere, is laid out to: (1) fill the requirements of the police as regards registering and finding the graves; (2) meet the requirements of the health authorities in all sanitary details; (3) be self-supporting; (4) conform to the customs and take account of the prejudices of the community; (5) manage its affairs as any good merchant manages his.

The area required is determined with reference to the time during which the bodies may remain undisturbed, and the yearly demands for space. In technical matters there ctry and sentiment of the proper sort as possible.

Landscape pictures and statues, with friendly quiet seats, flowers in their season, sunny and shady, open and sheltered paths in pleasant alternation, altogether make the frame for that which serves for the business—for it is often a mere business—of burial.

One of the most famous cemeteries in Europe, and in fact in the world, is that in Ohlsdorf, near Hamburg, in the laying out and management of which the foregoing general principles have been faithfully embodied.

This wonderful "God's acre," the pride of Hamburg, and indeed of Germany, is the creation of its director, the architect Herr Cordes, and has awakened interest everywhere that the modern idea of a municipal general cemetery has found root.

As far back as the sixties the growth of the great commercial city at the mouth of the Elbe necessitated discussion of the question of creating a general municipal cemetery to replace the already numerous churchyards. There were at that time no such cemeteries in Germany, and the plan met with much opposition. Landscape gardening in connection with such institutions was known only in America; but at last it was decided to put such a plan into practical shape, and the result is the largest cemetery in Europe; a burial-place where in every direction charming landscape and architectural effects are to be foundwithout, however, clashing with the original purpose of the plot. Even in the quarter devoted to the graves of the poor, emptiness and barrenness is avoided by skilful planting.

The necessary land was acquired in 1875, mostly treeless, criss-crossed by wretched walls, partly sandy, partly clayey soil, and altogether poorly suited for landscape gardening. In prehistoric times it was already a burial place, as shown by the ancient mounds and rings, found a yard or more below the surface. Some of the latter, and one of the former, have been preserved in the present scheme, near the Kapellenstrasse, behind the main "square."

As most of the Hamburg churchyards were already full, it was necessary to work rapidly, in order to make the new burial-place ready for the reception of the dead of the great and rapidly growing city.

In 1880, cight hectares, or say 20 acres of the entire 32 acres, were consecrated for burial purposes, and since then this entire area has been increased to 92 acres, exclusive of a separate Jewish cemetery of 2.6 acres at the southern end.

The ground has a west front of 3,600 feet, with one road from the main entrance, northwards, and a transverse avenue east and west, towards the water tower. At distances of about 150 feet the ground is divided into squares; each of these is consecutively numbered and lettered, and each grave numbered, so as to be easily found. Sign-posts and plans prevent unnecessary wandering.

There are four chapels, each with a room for religious services, and one or more waiting-rooms.

The land is rolling, the highest point being about 50 feet above the lowest level; the soil is sandy clay and coarse gravel, and well watered, so that it must be drained at a minimum depth of eight feet. There are five eatch-basins for surface drainage. About three-quarters of the ground must be drained; the rest, lying lower, is sandy and needs no drainage. There are 78 kilometers, or nearly 50 miles, of drains. From the catch-basins the water flows over a dam into the lowest portion of the ground. Excessive rain-fall or snow water is distributed through the sandy portions, where it disappears by infiltration.

There are six miles of wide roads and over 40 of water-pipes, with 2,100 cocks, and fed from the catch-basins by pumps driven by petroleum motors. About 1,000 benches give facilities for resting and thought.

A crematory has separate entrances from the main and the Jewish sections.

The bodies must remain in the earth at least 15 years; as a rule they remain 25, after the last burial. Burial ceremonies of every sort are permissible.

In the "honor" section of the cemetery there is a series of statues of Truth, Charity, Pity, etc.

The collection of conifers is very rich, and arranged according to the country of origin. A particularly interesting specimen is the *Thuja Versmanni*. Lindens, beeches, sycamores, and red oaks are grouped in special sections. There are flowers all the year around; the Christ-rose peeps through the snow, the snowdrop,



LOOKING ALONG THE EDGE OF THE "HONOR SECTION." Ohlsdorf Cemetery, Hamburg, Germany.

March violet, and anemone follow, the crocus and primrose, scilla and "Pfefferstrauch;" and among flowering shrubs the Pyrus syringa and rhododendron. Then follow azaleas and roses, and in late summer asters, dahlias, etc. Each sort has in some one section its special and well-adapted quarter.

The native birds have made themselves at home all over, and are especially numerous in certain sections.

A beautiful birch-bordered path is especially charming in Spring, when it scents the surrounding air. An addition of about 125 acres, with chapel, is being prepared.

Of the thousands of pictures that have been taken of this famous cemetery, we give here four.

One photograph shows the south pond, which serves as a catch-basin for the surface drainage of the street. In the foreground there blooms the rose-colored *Pyrus floribunda*; in the background, to the right, a group of syringa, and in the middle there is a fine wrought-iron bridge.

Another picture shows a view from the side of the "honor" cemetery. Here the formation of the land calls for terraces. The thickets are ornamented with garlands of dwarf conifers and high syringas.

The view from the center of the "honor" section shows a figure of Christ that is a present from a Hamburg merchant. At its foot there is a bronze shield with the motto: "Daran erkenne ich, dass Ihr meine Jünger seid, so Ihr Liebe untereinander habt." St. John III, 35.

The sides are planted with pillar

Another photograph shows an urn monument and a walk in the birch grove, in which are disposed the urns with the ashes of those who have been cremated. The birches permit the passage of enough light through their foliage to allow growing flowers beneath them. This is a most unusual and impressive landscape effect, and one that could doubtless not be matched in any other cemetery in the world

The Forest Cemetery in Munich is



THE SOUTH POND AND ITS PLANTING, OHLSDORF CEMETERY, HAMBURG.

another cemetery where careful management and fine landscape effects are sought. The rules of the Munich cemetery governing the erection of monuments and the care of family vaults, are very comprehensive and carefully drawn, and offer interesting comparison with the regulations of the best modern American cemeteries. They are as follows:

Sec. 1. The cemetery comprises single graves placed in rows, single graves arranged by families, joint graves for families, vaults to be rented, catacombs without superstructures, and catacombs with superstructures.

Sec. 2. In the use of this forest as a eemetery the general tone of a free and unhampered Nature shall be preserved as far as possible; in the laying out of the graves this purpose shall constantly be kept in view. This general tone or impression of Nature should not be destroyed in the course of erecting monuments, by the placing in propinquity of monuments of discordant architectural designs or by the fencing in of graves or monuments.

See. 3. In order to avoid such relative architectural discord and in order to preserve a uniform and harmonious tone, in the cemetery, it is hereby ordered that the following regulations be carefully observed

and the adjoining tombstones is avoided by the judicious planting of trees and shrubs.

See. 5. If it is desired to place a mound over any grave it must be of the arched type and must not, at its highest point, be higher than thirty or forty centimeters. Sloping or box-like barrows are forbidden. White paper wreaths will not be permitted. All planting on or around the graves must be done with a view of preserving unity and, harmony, from an artistic standpoint, in the appearance of the cemetery.

in the appearance of the cemetery.

Sec. 6. All fencing in of graves is strictly forbidden. Fences spoil the illusion of a free Nature, created by the forest, and are unpleasant blots upon the landscape.

Sec. 7. The above regulations must be strictly observed by each and every possessor of a lot

sessor of a lot.

Sec. 8. The consent of the management of the cemetery must be obtained before any monument may be erected. This permission must be applied for in the office of the municipal government, the petition being accompanied by the plans or models on a scale of one to five, and by a statement as to the kind of materials to be used, as to the colors in which the monument is to be decorated, and as to the inscription which is to be made. The plans must be presented in duplicate.

Sec. 9. The regulations put into force by the municipal government on the 24th of February, 1898, with respect to the erection of monuments, planting of trees, etc., on all city cemeteries, are valid and enforceable as to the Forest Cemetery, only in as far polished or dark stones will be permitted only in exceptional cases, the position of the grave being in this respect the determining element.

(c). Other appropriate materials for tombstones are enameled wrought iron, painted oak or lareh, and cast bronze in conjunction with stone.

(d). By means of decorating and gilding highly artistic effects can be attained.

(e). The inscriptions on the tombstones should also be made to serve a decorative purpose; therefore they should be laid out very carefully and not painted in glaring colors. Type or rough-surface inscriptions are forbidden.

(f). It should be carefully observed that there are not too great variations in the forms and shapes of the different tombstones and monuments from one subdivision to another. For order is beauty. Collectively and singly they should produce an artistic unity and should bear a mutual relation toward each other. It is through the forms of individual monuments that a unified and congruous entirety can be produced. Cheap tombstones made in wholesale lots according to a uniform pattern are forbidden.

(g). For the decorating of the graves the following recommend themselves especially: the various kinds of mosses, ferns, juniper, clusters of wild vine and flowers, the latter in appropriate selection. Artificial beds of plants are forbidden,

THE COVER ILLUSTRATION

The illustration on the front cover of this issue shows an excellent example of cemetery fence, which suggests complete and substantial protection. Its rigid construction and simplicity of design also add a touch of beauty.

The wisdom of proper protection of cemeteries is no longer doubted. From a business standpoint it must be admitted that such protection is equally as important as the beautifying of the grounds; the one invites public confidence, the other attracts in a similar manner; both are necessary to meet the popular idea of a modern burial place.

The subject of our illustration was taken from a section of fence at Rose Hill Cemetery, Chicago, which separates these beautiful grounds from the Chicago & Northwestern Railway tracks, where the property skirts the right of way. It was designed, built and erected by the Stewart Iron Works Company, of Cincinnati, O.

There are some 2,600 feet of this design, which is 5 ft. 6 in. high; ¾-in. square pickets. centered 4½ in. apart, with 1¼-in. square line posts spaced 8 feet on centers.

* * *

Note: In referring to the fence at Washington Cemetery, illustrated on the cover of our last issue, the length of fence given should have read 25,000 instead of 2,500 feet.



IN THE CENTER OF THE "HONOR SECTION," OHLSDORF CEMETERY

in the laying-out of the graves and in the erection of all monuments and tombstones in the cemetery.

For this purpose there have been prepared certain plats laying the entire cemetery out into several subdivisions, in some of which only standing tombstones, in others only flat ones may be crected, those general subdivisions being again divided into those in which only iron tombstones and those in which only wooden ones are permitted. The management has put in all the foundations necessary for the graves and for the fixed portions of the subdivisions. The erection of all further foundations is absolutely prohibited.

The monuments and vaults cannot, where the foundations are already constructed, exceed two meters in height, one meter in width, and sixty centimeters in depth, and in the absence of foundations, a meter and a half in height, seventy-five centimeters in width, and fifty centimeters in depth.

Sec. 4. On large family graves and over groups of separate graves all belonging to one family, monuments larger than the above can be ereeted, providing they are of artistic value and providing that a discord from the artistic standpoint, between them

as they do not conflict with the above regulations.

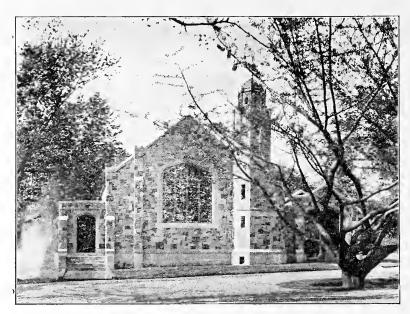
Sec 10. The duty of the enforcement of all the regulations respecting the cemetery shall rest upon a special commission appointed for that purpose by the municipal government, said commission also passing upon all petitions for the erection of monuments filed in accordance with the provisions of section eight above. This commission shall consist of a counsellor of the municipal government as chairman, of the administrative board of cemeteries, and of one representative of the eity department of buildings.

of buildings.
Sec. 11. The municipality shall not be liable for any damage to monuments or graves caused by snowstorms or windstorms.
SUPPLEMENT. Directions as to the proper decorations for graves in the Forest Cemetery.

(a). The value of a monument lies not in its high cost but in its artistic harmonizing with its environments.

(b). For the Forest Cemetery the most appropriate materials to be used in the construction of monuments are tufaceous limestone, granular limestone, nagelflue, chalkstone, and granite. Carrara marble and all

NEW CHAPEL OF INTERESTING ARCHITECTURE



NEW CHAPEL, WOODLAWN CEMETERY, EVERETT, MASS.

The new mortuary chapel recently dedicated with impressive exercises in Woodlawn Cemetery, Everett, Mass., is one of the best of its kind in Massachusetts. The building is 87 feet long and with its porch and carriage porch, 73 feet wide.

The exterior is of concrete to the limestone water table or belt and above this it is built of Weymouth seam faced granite in broken range ashlar, of grays, browns and red bronzes—all squared to shape and

pointed with round raised joints. The architecture is of the gothic type. The exterior trimmings are of limestone, the roof of Ludovici lead tile, copper flushings, gutters and conductors.

At the front of the building is an octagonal tower of stone enclosing a staircase leading to the singers' gallery and to the basement.

Entering the chapel by either porch in front through vestibules finished in brick and oak with English quarry tile floors, is the nave, 29 feet wide and 56 feet long, to the chancel. The interior is of tapestry brick dadoes with gray faced brick walls and tile floor. There are three aisles, the center one being extra wide.

The lighting of the nave from the front is through a magnificent triple glass window in memory of the Benjamin Phipps family. Six triple windows in the sides are memorials to various contributing families and at the bay end of the chancel are three large single memorial windows.

On the left of the chancel is a robing room with oak screen and on the right a mourners' room and conveniences with similar screen. All the roof framing trusses, etc., are exposed and of ornamental gothic type finished, and with wrought iron straps.

The interior finish is of oak. Ventilation is provided for by two large ducts, and the building is warmed in winter by fresh air. Oak pews for 150 persons are provided. The cost of the building was \$25,000.

One feature of the new chapel is the tunnel by which it is connected with the receiving tomb, and through which the casket will be taken.

The architects were Loring & Phipps, the builders James T. Wilson & Son, and Horace J. Phipps & Co. furnished the memorial windows. The treasurer of Woodlawn cemetery is Mr. Roscoe Pierce and the superintendent is F. F. Marshall.

MR. FRENCH'S MASTERLY FIELD MEMORIAL

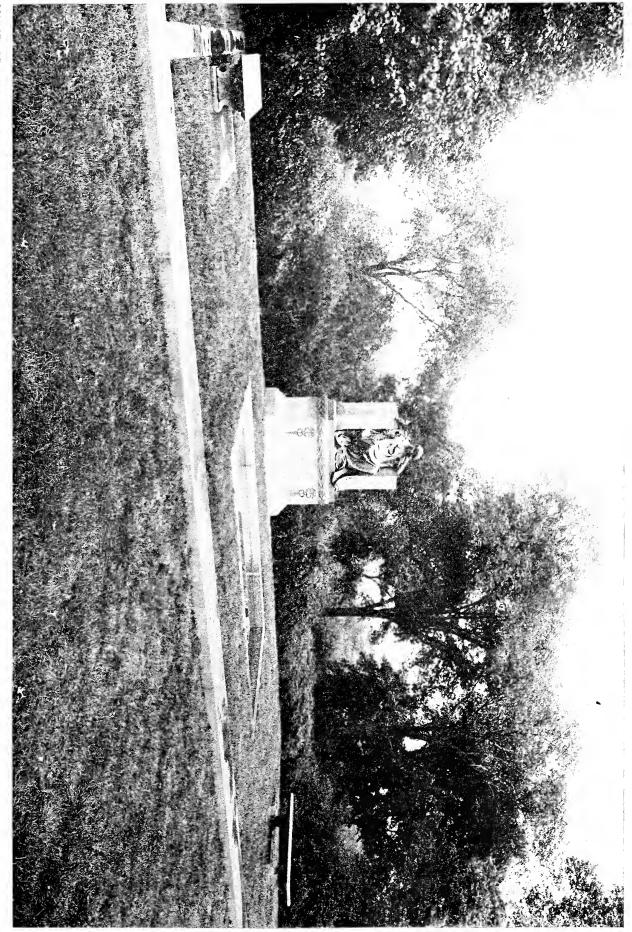
Daniel Chester French's memorial to the late Marshall Field just completed on the Field family lot in Graceland Cemetery, Chicago, and illustrated on the opposite page, will easily take rank as one of the most impressive private memorials in the world. The art world will in time give it place next to the wonderful sculptured Presence in the Adams memorial of Saint-Gaudens in Rock Creek Cemetery in Washington, and Mr. French's Millmore memorial in Boston known in its many reproductions as "Death and the Sculptor." These two have long been regarded as the two finest private memorials in America, and the Field memorial may well be recognized as the third member of the higher race of sculptured cemetery memorials.

In his stately memorial monumental works Mr. French has more than once given evidence of a peculiar sensitiveness to the peculiar qualities required for these enduring and silent testimonials to the dead,—the touch of awe, the high elevation, the sense of stillness, and remoteness from hurrying human affairs. In none has he succeeded better than in the Field Memorial and in this instance these good artistic qualities are supplemented by the beauty of the architectural and landscape setting; the beauty of spacing and proportion set off by long lines and enhanced by the curiously just flow and fall of the lines of the seated

figure. Both the sculptor and the architect, Mr. Henry Bacon, of New York, in this monument to Memory, seem to have excelled in those qualities in which they have previously been justly distinguished.

Probably no cemetery memorial in America has received such a carefully planned and impressive landscape setting. The lot is one hundred feet wide and eighty-eight feet deep and is bordered by a wealth of trees and shrubs that make the finest effect in a cemetery that is noted for the skilful landscape treatment of its park sections and of its many fine memorials and tombs. The impressiveness of the beautiful figure is greatly enhanced by the effect of gazing into the silent pool in front, the first use of water effects in the composition of an individual cemetery memorial in this country. The pool is about eight by sixteen feet and is surrounded by a curbing of sea shell granite from Maine, the same material that is used for the low curbing about the lot, and for the benches at either end of the lot. The pedestal proper, supporting the bronze figure, is of Waushara, Wisconsin, granite. Reliefs on either side symbolize Equity and Integrity.

Charles G. Blake & Co., of Chicago, were the contractors for the erection of the work, and the bronze was cast by Jno. Williams, Inc., of New York.



MARSHALL FIELD MEMORIAL, GRACELAND CEMETERY, CHICAGO; DANIEL CHESTER FRENCH, SCULPTOR; HENRY BACON, ARCHITECT.

CEMETERY NOTES

A. A. C. S. CONVENTION 1912

The executive committee for the 1912 convention of the Association of American Cemetery Superintendents has been appointed by President John J. Stephens, of "Greenlawn," Columbus, O., as follows:

James Currie, "Forest Home," Milwaukee, chairman; W. S. Pirie, "Forest Home," Milwaukee; J. Roder, of Milwaukee; E. G. Carter, "Oak Woods," Chicago, and George L. Tilton, "Graceland," Chicago.

The committee will organize at an early date in order that they can ask the members on the program to prepare papers during the coming winter. Any further information can be had from the committee or from Secretary Bellett Lawson, Jr., "Elmwood," River Grove, Ill.

The work of removing 3,000 bodies in St. Vincent's Cemetery, Plymouth, Pa., which is gradually falling into the mine workings beneath it, to the new cemetery just purchased by the congregation of St. Vincent's Church, has begun The work will cost \$30,000 and will be under the supervision of the State and borough health authorities.

The Loveland, Colo., authorities are planning to purchase the Lakeview cemetery, now owned by Judge Osborn, for a municipal cemetery, carry the city water on to the grounds, and make many needed improvements.

The recent contention over the management of Walnut Ridge Cemetery, at Jeffersonville, Ky., has been settled by the election of three trustees, Louis C. Baird, Bailee L. Burtt and Adolph I. Frank. The board reorganized as follows: Bailee L. Burtt, president; Louis C. Baird, secretary; Adolph I. Frank, treasurer.

For the work of removing the 600 bodies found within the flow line area of the reservoir at Delta, N. Y., on the barge canal route, the lowest proposal of eight was from Joseph Kalk and Alfred Brown of Taberg, Oneida county, for \$7,409, engineer's estimate \$8,190. Only one bid was received for the removal of the 30 bodies found along the shores of the Mohawk river, that of Thomas F. Riley, of Troy, for \$723.60.

The committee on Cemeteries of Racine, Wis., has decided that, instead of leasing the Osborne farm, recently purchased for a future addition to Mound

Cemetery, to a farmer the city shall farm the area, and in such a way that the 51-acre tract shall be improved in the line of a future cemetery development.

Both Mt. Washington and Elmwood Cemeteries, Kansas City, Mo., have been sued in the courts for damages, the former in \$25,000 for alleged misplacement of a body in a vault, and the latter for injury sustained by an attendant at a funeral stepping into an open sewer manhole on the grounds.

A large granite stone of boulder shape, will soon be set in the center of the Fishermen's Rest at Beechbrook Cemetery, West Gloucester, Mass., through the generosity of John Hays Hammond, who bought a tract of land in the cemetery a year ago, for the burial of indigent Gloucester fishermen and sailors. The stone will have a five-foot base, will be three feet in width and five and one-half feet high. It will have a smooth face, with a conspicuous anchor chiseled on it, while on a polished tablet there will be a scriptural quotation. The stone is being cut by Kavanagh Bros., of Quincy, and will be set up probably in January.

St. Mary's Cemetery Association, Syracuse, N. Y., has opened an office in the rectory of the Cathedral of the Immaculate Conception for business in relation to the removal of bodies from the old St. Mary's Cemetery to the new one near Orville. The work of removal has begun and there are more than 5,000 bodies to be removed.

The trustees of the Lutheran Evangelical church at Honeytown, O., are much relieved since they have made good their claim to a clear title to the land occupied by the cemetery. This cemetery is one of the prettiest in the county, but some years ago there was a question as to title which a thorough investigation has cleared up.

Chairman Fawcett and associates of St. Louis, Mo., on the Outside Pauper Relief Committee appointed by the St. Clair county supervisors made an inspection recently of the county cemetery on the Rock road. They report the condition of the cemetery as deplorable.

A new situation has developed in the efforts of the Conley sisters, descendants of the Wyandotte tribe of Indians, to prevent the sale of Huron Cemetery in Kansas City, Kas. The tribe has

gone back on them and wants the government to sell the cemetery to Kansas City, Kas., and have it preserved as a park. They wish the remains of their forefathers to be transferred to one section of the plot and a monument erected to them.

A contract has been let for the immediate erection of a \$30,000 marble and bronze winter chapel and receiving vault at the Graceland Park Cemetery, Sioux City, Ia. The outside dimensions of the chapel and vaults will be 48 by 50 ft. and 43 ft. high. Accommodations for fifty bodies will be provided, and room for any ordinary funeral assemblage. The idea of the chapel is based on the Canadian burial system, by which winter interments are abol-The services ordinarily conducted at the grave will be held in the chapel instead, and the body will be deposited in one of the receiving vaults till spring permits a transfer to the grave. White marble will be the main material of construction both within and without, with bronze doors and copper outside metal work. The roof will be of glazed green Spanish tiling, and cathedral art glass will be set in the big front window of the chapel. The woodwork will be of mahogany. In design the structure will be Gothic; it will be lighted by electricity and heated by water, and will be fireproof.

An overheated furnace in the office Pine Grove Cemetery, Lynn, Mass., on the morning of October 18, caused damage of \$100 before it was extinguished.

A claim has been made by Arthur E. Sandford, a local contractor, that he is the owner of the Wesley Methodist Episcopal Church burying ground in Belleville, N. J., and to prove his ownership Mr. Sandford recently filed in the county clerk's office a deed for the property executed in 1845. The church trustees assert that they own the property, and, through their counsel have filed a bill in the Court of Chancery to establish such ownership. The burying ground is south of John street and north of New Bridge street. For the last sixty-six years it has been exempt from taxation because it was understood that the church had undisputed right to the land. This year, however, the Belleville officials levied a tax upon the

A leak in the city water mains in Fernhill Cemetery, St. Johns, N. B., is giving the directors of that cemetery some anxiety. It has been a trouble for three years and is doing damage to a number of lots.

The use of automobiles in funerals and for other purposes in St. Louis,

Mo., has been stimulated by recent announcements from the Bellefontaine and Calvary cemetery associations that automobiles will hereafter be permitted to enter the burial grounds. The only restriction to be placed upon them will be to prevent speeding and the improper use of the privilege.

CEMETERY ADDITIONS AND IMPROVEMENTS

Mr. Louis T. Houghton, who was born in Sutton, Mass., and whose parents and relatives are buried in the South Sutton Cemetery, being dissatisfied with the appearance of the family lot on a recent visit determined to improve it and expended some \$2,000 in doing so. This contrasted so seriously with the condition of the rest of the burial ground that he made a further donation to the selectmen, and the people are delighted with the improvements resulting.

The Media, Pa., Cemetery Company has purchased adjoining lands. This will provide room for laying out a large extension, and the new grounds will be placed in good condition.

The new mausoleum for Oak Hill Cemetery, Evansville, Ind., is now under construction, the concrete foundation having been completed. The walls will be laid in brown brick and mortar, with trimmings of cream glazed terra cotta, and roof of green Spanish tile. It will have bronze doors and the floor will be laid in encaustic tile, with wainscoting of marble. Provision will be made for nine caskets. Cost \$3,000.

The granite memorial fountain presented to Prospect Hill Cemetery, Brattleboro, Vt., by Mrs. Starr Clement was last month formally presented to the trustees and accepted.

The Cemetery Committee of the City Council of Augusta, Ga., has decided to open up the 15-acre extension of the West View Cemetery.

A large amount of improvement work, including a new approach, has been carried out in Evergreen Cemetery, Jacksonville, Fla. A receiving vault and certain park effects are contemplated for the near future.

An addition of area for about a hundred lots has been made to Greenwood Cemetery, Grand Rapids, Mich.

Forty acres of ground has been added to Crown Hill Cemetery, Indianapolis, Ind., by the purchase for \$55,000, of the property adjoining the cemetery and fronting Thirty-eighth street. The ground will be platted in cemetery lots.

Quite a sum of money has been expended the past few months on repairs, additions and improvements in the cemetery of Hartsville, Tenn, South Nashville, Tenn., celebrated on the afternoon of October 13, when the cornerstone to the southeastern gate of the City Cemetery was laid with interesting ceremonies. The new gate is a gift from the Woman's Federation of South Nashville, and when completed will be an ornament to the historic old burying ground, as well as to the entire community in that section of the city.

Improvements in the Old Burying Ground of Orange, N. J., have been continued during the past season, which has attracted much interest in the community. An effort is under way to establish an endowment fund for the future care of the grounds.

The regular cleaning up and repairs of the five cemeteries controlled by the city authorities of New Orleans, La., were completed in time for All Saints Day, November 1.

Work on the extensive improvements planned for Calvary cemetery, Youngstown, O., is now under good headway and a large force of men are bringing about great changes in the general appearance of some parts of the cemetery. The main feature of the present improvements is the incorporation of 22 acres laying just to the east into the body of the cemetery proper. The work is being carried out under Mr. William Wilson, and some \$8,000 will be expended.

Lone Fir Cemetery, Portland, Ore., about the improvement of which to meet the up-to-date requirements of its location, considerable stir is being made, must either be abandoned or improved, say those working for it, and strenuous efforts are in progress to better conditions of the old cemetery.

The Woman's Cemetery Association, of Milton, Ind., will make some decided improvements at the Westside Cemetery. There will be a new street opened up on the east side and a new entrance with new drives put in at the southeast corner.

Improvements in the new Hollywood Cemetery, the outgrowth of the merged Hollywood and Rose Hill cemetery companies, have begun. The new company proposes to spend some \$20,000 on the property, putting both cemeteries into the best of condition. Included in the improvements are a stone and cement chapel, a waiting room, receiving vaults, archway and side-track for the street cars. The Hollywood Cemetery Company was capitalized at \$100,000, and the Rose Hill Company at \$50,000. Dr. S. W. Foster is president of the new corporation, E. B. Spalding, ice-president, and A. T. Spalding, secretary.

The first interment in the Grace Hill negro cemetery, located near Mason City, Ala., the negro settlement beyond Elyton, was made September 28. The cemetery enclosure will cover 20 acres of rolling land with driveways and is about a mile from Elmwood on the Columbiana pike. It is to be maintained from the proceeds of a fund to be provided by a 10 per cent deduction from sales of lots.

The Bethel Cemetery Association of Jamestown, N. Y., has been incorporated with the secretary of state with the following as directors for the first year: David Schine, Meyer Schine and Samuel Davis of Jamestown. The purpose of the association is to establish a Jewish cemetery, land for which has been purchased at Lakewood.

More land is to be aded to the Decatur, Ind., cemetery.

FROM ANNUAL REPORTS

The annual report of Tacoma Cemetery, Tacoma, Wash., for the year ending with June 1 last, showed receipts amounting to \$49,875.24, which included: Sales, \$13,357.00; single graves, \$4,947.50; opening graves, \$3,978.00; care of lots \$2,553.00; perpetual care, \$11,808.65; greenhouse, \$2,791.65, etc. The expenditures amounted to \$18,961.10, of which labor consumed \$16,108.50. A strong appeal is made for perpetual care and there are 315 whole lots and 789 half lots now under that provision. Fifteen hundred lots were cared for during the year and 649 interments made. All monies received for Perpetual Care, and 30 per cent of sale of all lots and single graves, are placed in the "Irreducible Fund," which is protected by state law, to provide for the future care of the cemetery. The "Irreducible Fund" now amounts \$131,387.17 and the general fund to \$49,142.74.

A statement of the receipts and disbursements of the Cemetery of Spring Grove, Cincinnati, for the year ending Sept. 30, 1911, is just at hand. The total receipts with balance were \$168,-624.40, which included Sale of Lots, \$45,061.65; Interments and Foundations, \$32,536.54; Myrtle and Special Care, The total disbursements \$25,751.29. were \$159,086.95, among them being: Interments and Foundations, \$14,431.14; Myrtle and Special Care, \$5,552.82; Operation and Maintenance, \$39,715.75; New Grounds, \$6,284.36; Gray Road Gate and Shelter House, \$4,089.36; Salaries, \$19,157. Lots sold, 104 and 22 fractions equal to 47,264 sq. ft. There are 15,808 single graves occupied; number of interments to date, 81,206, and Spring Grove has 11,839 lot holders.

TOPICAL INDEX to OUTDOOR LITERATURE

An Index to articles on Gardening, Forestry, Park, Cemetery and Civic Improvement and kindred subjects in leading general and special magazines

Subscriptions will be received for any magazine or periodical at club rates with Park and Cemetery. Publications in which articles appear are listed below, and referred to by abbreviations, thus: S. L. 8:67-8, Feb. 09, means: Suburban Life, vol. 8, pages 67-8, February, 1909, Single copies should be ordered direct from the publications at addresses given below.

PUBLICATIONS INDEXED AND ABBREVIATIONS USED.

American Botanist, Joilet, Iii. (A. B.), 75c year; 20c copy.
American City, The, (Am. C.), New York, \$1.00 year; 10c copy.
American Florist, Chicago (A. F.), \$1.00 American Florist, Chicago (A. F.), \$1.00 year; 5c copy.

American Homes and Gardens, New York (A. H. G.), \$3.00 year; 25c copy.

Architectural Record, New York (Arch. Rec.), \$3.00 year; 25c copy.

Art and Progress (A. & P.), Washington, D. C.; \$1.50 yr.; single copy 15c.

Beautiful Homes (B. H.), St. Louis, \$1.00 year; 10c copy.

Canadian Florist, The, Peterboro, Ont., Can. (C. F.), \$1.00 year; 10c copy.

Canadian Municipal Journal, Montreal (C. M. J.), \$1.00 year; 10c copy.

Conservation, Washington, D. C. (Cons.), \$1.00 year; 10c copy.

Country Life in America, New York City (C. L. A.), \$3.00 year; single copy, 25c. City (C. L. A.), \$3.00 year; single copy, 25c.
Country Gentleman, Philadelphia, (C. G.), \$1.50 year; 20c copy.
Century Magazine, New York City (Cent.), \$3.00 year; 35c copy.
Chautauquan, The, Chautauqua, N. Y. (Chaut.), \$2.00 year; 25c copy.
Craftsman, The, New York City (Cr.), \$3.00 year; 25c copy.
Embaimers' Monthly, Chicago (E. M.), \$1.00 year; 10c copy.
Fern Bulletin, Joilet, Ili. (F. B.), 75c year; 20c copy.
Florists' Exchange, New York City (F. E.), \$1.00 year; single copy, 5c.
Florists' Review, Chicago (F. R.), \$1.00 year; 5c copy. Garden Magazine, Garden City, N. Y. (G. M.), \$1.00 year; single copy, 15c. Gardening, Chicago (Gard.), \$2.00 year; single copy, 10c. Gardening, Chicago (Gard.), \$2.00 year; single copy, 10c. Gartenkunst, die, Frankfurt. Germany (German), G. K., \$4.00 year; 50c copy. Good Roads Magazine, New York (G. R. M.), \$1.00 year; single copy. 10c. Horticulture, Boston (Hort.), \$1.00 year; single copy. 5c. House Beautiful (H. B.), Chicago; \$3.00 year; 25c copy. House and Garden, Fhiladeiphia (H. G.), \$5.00 year; 50c copy. Independent, The, New York (Ind.), \$3.00 year; 25c copy. Landscape Architecture (L. A.), Harrisburg, Pa.; \$2.00 year; 50c copy. Meehan's Garden Bulletin, Germantown, Philadeiphia (M. G. B.) 50c year: 5c copy. Minnessota Horticulturist. Minneapolis

town, Philadelphia (M. G. B.) 50c year; 5c copy.
Minnesota Horticulturist, Minneapolis (M. H.), \$1.00 year; single copy, 10c.
Moeiler's Deutsche Gaertner-Zeitung, Erfurt, Germany, (German), M. D. G., \$3.00 year; 10c copy.
Municipai Engineering, Indianapolis, Ind. (M. E.), \$3.00 year; single copy, 25c.
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year; 5c copy.

Awakening of the Cities, by Henry Oyen. Illust. World's Work. Garden City, New York. June to October, 1911.

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Forest Leaves, Philadelphia, Pa. (For. L.), \$1.00 year; single copy, 10c.

Fruit Grower (F. G.), St. Joseph, Me., \$1.00 a year; 10c copy.

Gardener's Chronicle of America, Jersey City, N. J. (G. C. A.), \$1.00 year; single copy, 10c.

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Kansas City's Parks and Boulevards, by Howard E. Huselton. Illust. A. & P. 3:386-91. Nov., 1911.

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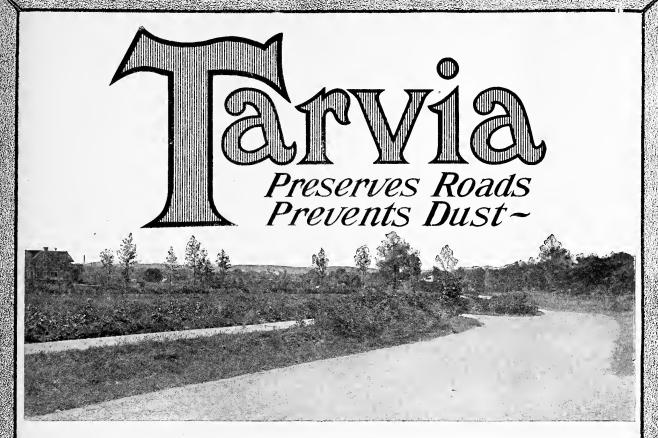
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Nursery, Managing a Big. Fruit Grower, St. Joseph, Mo. 22:500-501. Oct., 1911.



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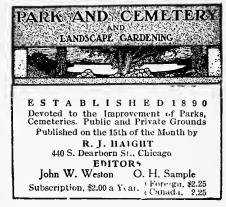


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Umbrella Bearers, a Worthy Family, by Wilhelm Miller. Illust. G. M. 14:169-72. Nov., 1911.

BOOKS, REPORTS, ETC.

Mr. Charles Mulford Robinson, author of "The Improvement of Towns and Cities" and "Modern Civic Art," and well known to readers of PARK AND CEMETERY as the author of city plan reports for a number of cities, has recently written another work of much importance to city improvement in "The Width and Arrangement of Streets," just published by the Engineering News Co. This volume is a careful study in town planning that has for its particular object the urging of a more scientific study of the laying out of streets to better adapt them to the needs of the particular traffic that uses them. Mr. Robinson's chief theme is the need for less rigid standardization in street platting; for wider main streets, and for the narrowing of those that have little traffic value. The book is the result of a first hand study of some thirty towns and cities in this country, a special research course in city planning, and a recent visit to Europe and to the Town Planning Conference at London, where the theme mentioned above was so cordially received by the expert town planners that Mr. Robinson has amplified the study and put into book form with many illustrations to enforce his points. The work sells for \$2.10, postpaid, and may be ordered from Park and Cemetery.

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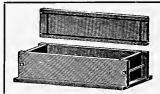
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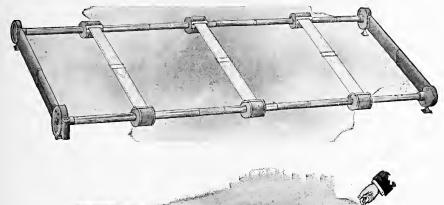
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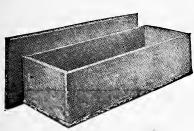
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den Library," just published by Doubleday, Page & Co., will be of particular interest to PARK AND CEME-TERY readers. "Garden Planning," by W. S. Rogers, is especially designed to help the maker of small gardens in fitting his desire to the conditions and situation. The author writes from actual experience in helping amateurs on city lots and on the average suburban plots. It deals with principles as well as practice and is illustrated by a wealth of sketches and plans. Some of the subjects discussed and illustrated are: The Garden Picture, the Rectilinear Principles, the Elements of the Garden Plan, Beds and Borders, Walks and Drives, Grass, How to Plan a Garden, the Rock Garden, the Rose Garden, Water in the Garden, Fences and Hedges and Planting. It sells for \$1.20 postpaid. "Vines and How to Grow Them," by William C. McCollom, is another interesting volume just added to the Garden library. It is a practical volume dealing with all kinds of climbing and trailing plants for garden effects. It covers not only the hardy annual vines and permanent woody vines for pergolas, etc., but many of the beautiful exotics which are grown for cut flowers in greenhouses. Many illustrations of trellises and supports and how to make them. The author has one of the largest collections of vines in this country. The price of the book is \$1.20, postpaid. Both of these works may be obtained from PARK AND CEMETERY.

From the Department of Agriculture: "Imports of Farm and Forest Products," Bulletin 90 of the Bureau of Statistics; "The Control of the Chestnut Bark Disease," Farmers' Bulletin 467; "Progress in Agricultural Education, 1910," by Dick J. Crosby, a reprint from the annual report of the office of experiment stations; "Conservation of the Soil," address of President Taft before the National Conservation Congress, issued as Circular No. 38 from the office of the Secretary of Agriculture.

Announcement of Two Year Winter Course in the College of Agriculture of the University of Missouri, Columbia, Mo.

PERSONAL

Mr. John G. Barker, Riverview Cemetery, South Bend, Ind., is planning the laying out of the Twin Branch Cemetery, the new cemetery of Mishawaka, Ind., east of the city. The area to be developed contains 50 acres.

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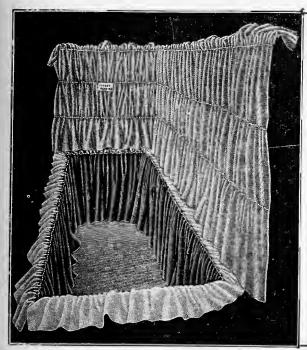
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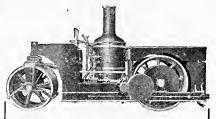
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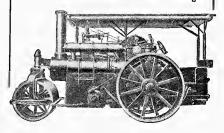
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Mr. William Haven Atkinson, superintendent of Riverview Cemetery, Trenton, N. J., and Emma Virginia Simmons, assistant secretary and treasurer of the Westminster Cemetery Company, Philadelphia, Pa., were married at noon on the 19th of October at St. Matthias Church, Philadelphia. After the ceremony Mr. and Mrs. Atkinson left for an extended trip through the South. Upon their return they will reside at 862 Center street, Trenton, N. J.

PUBLISHER'S NOTE

On September 1 the Postmaster-General put into effect the new order covering the transmission of secondclass mail matter, which includes such periodicals as PARK AND CEMETERY and similar publications. This necessarily will cause delay in delivery in most cases, and especially to our long-distance subscribers, whose patience the publisher invokes. There is considerable injustice in this effort at economy on the part of the Post-Office Department and it is to be hoped that the matter will meet a more satisfactory solution at Washington in the near future.

TRADE CATALOGS

Wholesale Price List, Special Trees, Shurbs and Hardy Plants, Fall 1911, from F. W. Kelsey Nursery Co., 150 Broadway, New York.

Wholesale Trade List, Fall 1911, from Eastern Nurseries, Jamaica Plain, Mass.

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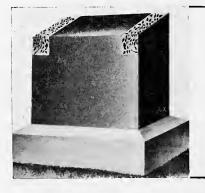
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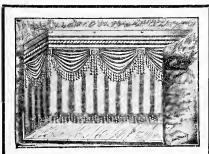
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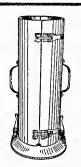
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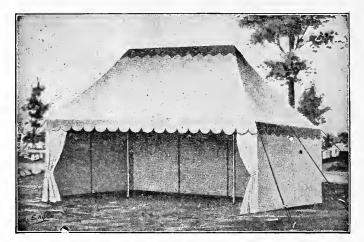
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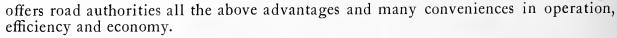
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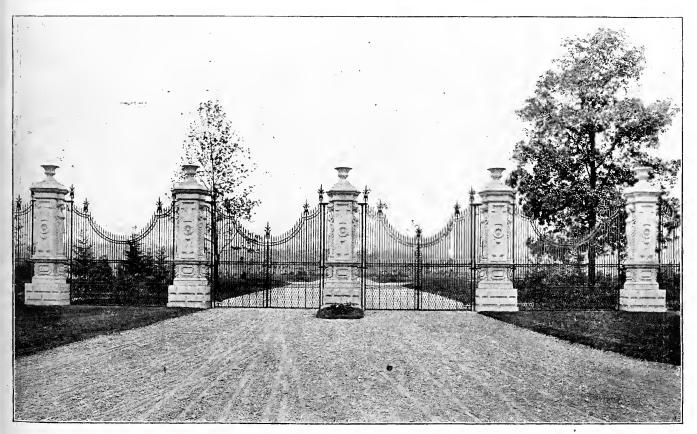
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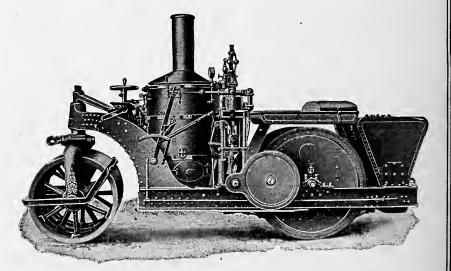
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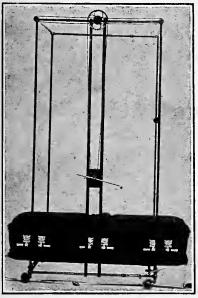
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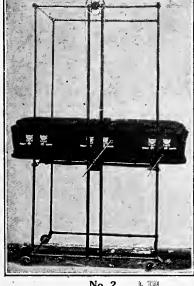
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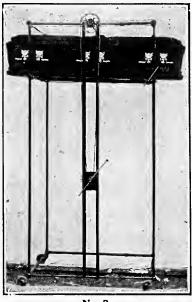
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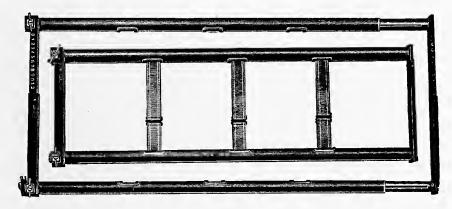


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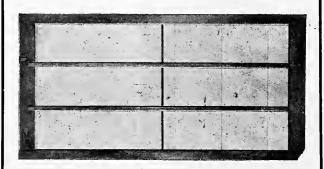
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PARK AND CEMETERY

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Vol. XXI

Chicago, December, 1911

No. 10

The City Trees

It is often an unfortunate feature in city finances that money is almost invariably short when the parks, and especially the city forester and his trees, are up for consideration. Certainly there is no part of civic embellishment that should have more serious practical attention at stated intervals than the street trees; and yet as a rule the city forester of our most important cities has more trouble in securing adequate appropriations than the officials of any other department of city government. There is something radically wrong in this, for street trees have a very important bearing on property values, and should be given their due share of the tax levy to enable them to be kept in healthy and presentable growth. Street trees are not by any means given their true value in relation to the city's welfare as is their due, in spite of the heavy damages that the courts have awarded in so many instances for their mutilation and destruction at the hands of the public utility corporations and others. In many parts of the country just now complaints are being made on the condition of city trees, and the time is right now that the expenditure of adequate appropriations will save far larger outlay later on. The past season over large areas of the country has been very detrimental to city tree life.

*** * ***

The Birds in Winter

The time of year suggests a thought for the birds. Under the best of circumstances our northern winters, especially, are particularly hard upon our feathered neighbors and visitors, and it is becoming a common practice, and a wise and eminently proper one, to provide both shelter and feed boxes, as well as a plentiful supply of food, to tide them over and to keep them with us. Not only should our parks and cemeteries do more in this way than they do, but bird boxes should be in greater evidence in the home grounds. It may not be generally known that Mr. Henry Ford, manufacturer of the Ford automobile, has dedicated his 2,200 acre farm near Detroit, Mich., to the birds, and proposes to make it the most notable bird reservation in the country. Every detail is being taken care of to carry out the plan; hundreds of bird boxes have been placed in suitable locations, and crops are grown to provide the natural food for the several species. A dozen feeding stations have been built conveniently situated, trees adapted to bird requirements are being set out, and, in fact, under the care of an expert in the work, the estate is likely to become a bird paradise. And, as is the case with many efforts to assist nature, the work becomes fascinating in its intricacy and detail. Birds soon become accustomed to the accommodations provided for them, and enrich our surroundings by their song and presence, and it is even known that many migratory birds overlook their natural habit of migration and remain throughout the year in a hospitable locality. This thought should be an attractive one

to all bird-loving people to encourage them on their home grounds. About 40 species of resident birds nest in the Bronx, New York, Zoological Park and a number of species winter there.



The Financial Care of Cemetery Lots

A new idea in providing for the care of cemetery lots seems to be furnished by the Scranton Trust Co., Scranton, Pa., which offers to undertake this work in perpetual trust, either under a last will and testament or by special agreement or deed of trust. It is proposed to undertake such trusts regardless of location of the burial places, and, moreover, the instructions of the donor are faithfully followed. Whatever sum may be placed with the company for investment for the purpose and, from time to time, reinvested as may be necessary, the income only is used in the proper care and maintenance of the lot. If the trust is created by an agreement or deed, the income may be made payable, if desired, to the donor for life, and afterwards used for the purpose specified. That no individual can very well undertake such a trust, nor make investments of small funds as advantageously as a trust company, will be probably granted; and it would also appear certain that the facilities of the cemetery companies for making and conserving investments are not by any means equal to those of a trust company. This proposition deserves careful consideration.

V V V

Social Centers and Their Amusements

The Chicago Educational authorities are making gratifying efforts to keep in the van of progress in connection with social center work, and at time of writing eleven such agencies for community improvement are about to open up in that number of public school buildings, and others will follow. It is recognized that a variety of wholesome amusement must be provided, the young needing special consideration, and therefore it has been decided that adequate space and other accommodations shall be afforded for dancing. Dancing is a healthful and attractive recreation, and moreover develops grace and polish in the individual; and under proper direction and restraint has a specific influence in the development of children. It is hardly possible to overestimate the value of the great school buildings used as "headquarters of community life and of co-operative action for social benefit." The facilities which boards of education have for making the school buildings both comfortable and attractive, in other words, well equipped civic club houses, should be an incentive in the establishment of such centers in all parts of the country. The free lecture courses which have been given by the "Chicago Daily News" in the great school buildings have amply demonstrated the value of such for betterment purposes. It is proposed now by the authorities to develop these school building centers into evening meeting places for young and oldparents' clubs, social organizations, civic debating societies-and all under the direction of the principal of the



PARK PROGRESS UNDER NEW ASSESSMENT LAW

The beginnings of the extensive park system for Indianapolis, made under the assessment law of 1909, have previously been reported in these pages, and it is gratifying to note that the park board of that city reports a development that has been a record of steady and consistent progress under the new law.

The chief fact that stands out in a review of the work of 1910 is that the new law was found to be practicable, and that a great deal could be accomplished under its provisions.

The year just closed has seen marked progress in the direction of solving these difficulties, although there is now litigation in the county courts over an assessment in the East Park District involving the validity of the law. The Board of Park Commissioners is sanguine of an entirely successful outcome in this litigation, and feels that no questions have been

raised that will not be found quite easy of solution with the proper interpretation of the provisions of the 1909 act. The board believes that any faults that may be developed in the process of this litigation will be found to be not in the essential principle of the assessment idea, but in details of administration.

In a general way it may be said of the park law of 1909 that the work so far done under its provisions has demonstrated the necessity for this special measure, but at the same time has shown its limitations and its weaknesses. The growth of the city is such that property values are increasing so rapidly that the limit of annual expenditure fixed in the law (\$200,000) is too small to keep pace with the city's progress. This has been shown especially to be true since the new work was started; because the work done along the

streams in the direction of parkway development has itself operated to increase property values along the line of future extensions; the city thus being placed in the position of throwing obstacles in the path of its own progress. At the same time, the work so far done has created a public demand for more work to be done on a scale larger than the limitations of the law will permit, and the board has therefore been forced to the conclusion, either that the limitations of the law must be modified, or some other means must be found of supplementing the revenues derived from benefit assessments under the 1909

It is encouraging, however, to note that the operations of the Indianapolis law have made such a favorable impression upon the second-class cities of the state, which include Evansville, Fort Wayne, Terre Haute



FISH HATCHERY AND KEEPER'S LODGE IN RIVERSIDE PARK, INDIANAPOLIS; VIEWED FROM TOP OF BLUFF.

and South Bend, that these cities are discussing the advisability of asking the Indiana General Assembly to modify the Indianapolis statute so that its provisions may apply to them. It is probable that the second-class cities will ask the legislature so to modify the 1909 law.

George E. Kessler, the landscape architect of the system, says in his report to the board:

"You have made a number of improvements along the streams that have brought about revolutionary changes in the appearance of several districts, and these encourage the expectation of similar improvements along other water courses. While these really fine improvements are not costly, they will in a very short time make this city famous for the beauty of its streams' parkways, its chief characteristic. Incident to and an important part of these connecting and encircling parkways, as means of communication through and about the city, you have in these a series of extremely valuable and well distributed playgrounds. Every bend of the streams has ground large enough for local playgrounds, some large enough for all the outdoor sports, and many finely located for small children's recreation grounds. All of these will have the fine setting of ample park space, creating especially in the children an appreciation of good appearance of their surroundings. Through the creation of these ample parkways of broad open spaces in all sections of the city, there is little or no encouragement to the establishment of congested dwelling house or slum districts in Indianapolis. This is in sharp contrast to so many older cities, where the park development was delayed or neglected until too late. In turn, it leaves but little need for the creation of large numbers of the playgrounds, so called, in closely built up districts where open space and a bit of gymnastic apparatus are the only possible forms of improvement. When these latter do become necessary, they should be entirely on school grounds, provided and governed by the educational department, and treated as outdoor school work."

The principal work done in Riverside park during the year—a work important in that it marked the beginning of an improvement that will in time change the entire structure of the park's system of drives—was the construction of an embankment to carry a broad roadway extending north from the Thirtieth street bridge on the west side of White river.

A work entirely different in char-



APPROACH TO MERIDIAN ST. BRIDGE OVER FALL CREEK, INDIANAPOLIS, 1910.



APPROACH TO MERIDIAN ST. BRIDGE OVER FALL CREEK ONE

acter but similar in results, that was started in Riverside park during the last year, was that of clearing out a great many trees in the old fence rows cutting east and west across the park, south of Thirtieth street and east of White river. Although the fences had been demolished at the time the several farms and tracts of ground were acquired to make up Riverside park, the trees were left standing. These rows of trees, cutting across the line of vision from any point north and south, gave the park the appearance of being composed of semi-isolated sections, and destroyed the effect of continuity and broad perspective, which should be the primary feature of the landscape in a park of the extent of Riverside. A great many trees in these rows

were cut out during the last year, and this made a vast improvement. There is still more work of this kind to be done from time to time as the forces at work will make it possible, and the same kind of work is to be done also on the west side of White river south of Thirtieth street.

Another important work done during the last year in Riverside park was the building of a new roadway on the Thirtieth street hill on the west side of White river.

By remodeling the old shelter in the south grove in Riverside park, the department was placed in possession of a very substantial and roomy shelter house, that will be of much service to those who use that section of the park.

Acting at the instance of the Mar-

ion County Fish and Game Protective Association, the department early in the year built, by the construction of inexpensive dams and sluiceways, a pond for breeding black bass in the lagoon on the west side of White river, in the south end of the park. The results accomplished with this crude plant were so encouraging, and seemed so important, that the department began late this fall the construction of a permanent fish hatchery in the extreme north end of the park, at the foot of the bluff just below the Myers road. With this work completed, the city has one of the finest small-mouthed black bass hatcheries in the country with two ponds, an adequate supply of pure spring water, and a lodge for the ocgan State fish hatchery at Comstock park, Michigan.

The most considerable improvement undertaken in Garfield park, outside of very extensive planting, was the building of a group of three tennis courts in a new location at the foot of the bluff not far from the shelter house. Widespread demand for bathing facilities was partially filled in Garfield park by the maintenance during some weeks of the hot season of two small bathing beaches in the waters of Bean creek, one for boys and another for girls.

The other and much more considerable park added to the city's system during the last year, the Ellenberger woods north of Irvington, became one of the most popular of the

city's playgrounds as soon as it was taken possession of by the Park Department in the spring. The only improvements undertaken consisted of the building of two structures giving toilet conveniences, and the cleaning of the bed of Pleasant run and the small rivulet which flows through the woods and empties into the run. The meadow land to the east of the woods was, however, plowed and seeded with blue grass and clover. It is the purpose of the department to build two baseball diamonds in this meadow. With the possible addition of one or two tennis courts, this will probably complete the improvements to be undertaken in Ellenberger woods, as it is the intention of the department to maintain the woods and adjacent ground as nearly as possible in their natural condition. The woods will thus remain primarily a picnic ground for the entire eastern section of the city.

The work of maintenance in the other parks of the system was very satisfactorily carried forward. There were a few permanent improvements, which may be briefly enumerated as follows: new outdoor gymnasium apparatus in Military park; a tool house at Indianola square; the regrading of Irving circle, where the soil was impoverished and the ground level much too low; and the placing of sheet from boxes with removable bags for waste paper in all of the larger parks.

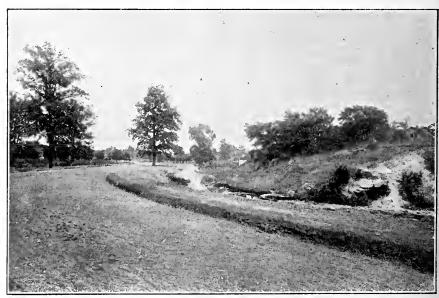
A review of the year's work would be incomplete without special refererence to the work of the forestry department of the Board of Park Commissioners. Early in the year,



POGUES RUN PARKWAY, INDIANAPOLIS, IN SPRING OF 1911.

cupancy of the two men who will care for the hatchery.

The equipment for the hatchery being furnished by the Park Department, the Fish and Game Association will maintain the hatchery at its own expense. It is expected that the ponds as they are now being constructed will be capable of breeding annually between 100,000 and 150,000 small-mouthed black bass, and the success heretofore achieved by the men interested in this movement, at their hatchery at Allisonville, warrants the belief that the Riverside hatchery, under the joint management of the Park Department and the Fish and Game Association, will be one of the most successful in the country. The ponds were constructed in accordance with suggestions made by Mr. Dwight Lydell, assistant superintendent of the Michi-



SAME VIEW ON POGUES RUN PARKWAY FOUR MONTHS LATER; THE BEGINNING OF FINISHED CONDITIONS.

through the co-operation of the mayor and the common council, the department was given an ordinance by which it was enabled better than at any time in the history of the city to control the trimming, planting and removing of trees in the public lawn spaces. Under the terms of this ordinance it is made illegal for any one to trim, remove or plant a tree in a street lawn without first obtaining permission from the Board of Park Commissioners.

The public gradually became aware of the new condition of affairs, and by fall little difficulty was encountered in persuading property owners to plant the proper kinds of trees, to trim those trees that were in need of it, and to remove some hundreds of dead trees that had been a menace to life and limb.

Under the rules adopted by the board within the terms of the forestry ordinance, the public service corporations were required, before trimming any trees, to submit a request to the Park Department for permission to do the trimming. In each case, upon receipt of such request, an inspector from the department went over the ground covered by the corporation's request and recommended either that the permission be given or that it be not granted. If trimming were done under permit then issued, the work had to be performed under the direction of an inspector of the Park Department, whose time was paid for by the corporation whose work he inspected. As a result of these precautions and these new conditions, very little complaint was made through

the entire year of the ruthless destruction of trees. Hardwood trees were trimmed only when the last year's growth of green wood could be cut in such a way as not to damage the tree's life or hurt its symmetry. The public service corporations were compelled to trim all trees that were touched, not only at the point where the branches of the trees interfered with the wires, but throughout the entire tree, so that the result would be symmetrical. If a dead tree stood in the line of the corporation's work, the company was compelled to cut it down and remove the stump. In a number of cases, as a result of these restrictions, the telephone companies put their wires in cables, or raised the whole lead of wires to get them above the trees.

During the larger part of the working year, two gangs of men were kept busy at what has come to be known as "tree surgery." Cavities that shortened the lives of trees otherwise sound were cleaned out and filled with cement. This work was exceptionally well done with the result that scores of fine old trees that would otherwise have died within a few years will be saved for many years to come. This work was done in the Ellenberger woods, the Fall creek parkway, Garfield park and Noble place.

A statement of the number of trees and shrubs planted in the different parks, together with certain facts in relation to the work done in the nursery in Riverside park is given in the annual report.



EAST SIDE OF CENTRAL AVENUE ONE YEAR LATER; PARKWAY BEGUN AND ROADWAY EMBANKMENT BUILT.



EAST SIDE OF CENTRAL AVENUE, INDIANAPOLIS. IN 1909; BILLBOARDS AND DUMP HEAPS.

During the summer, 12,000 young shrubs, 10,000 seedling trees and 2,000 vines and perennials were grown in beds to be lined out in nursery rows in the spring. With the addition of stock ordered of evergreens and deciduous trees, the department planted in the nursery about 28,000 evergreens, 30,000 trees and 18,000 shrubs. During the fall and winter 30,000 hardwood cuttings were made and put in storage.

The receipts for the year amounted to \$338,572 and expenditures to \$233,-217

The following compose the personnel of the board and its officers: Henry Jameson, president; John J. Appel, vice-president; Charles E. Coffin; Ferdinand L. Mayer; George E. Kessler, landscape architect; and Leroy E. Snyder, secretary and executive officer.

PARK BUILDING TO KEEP PACE WITH CITY GROWTH

By Charles A. Butterfield, Landscape Architect and Superintendent of Parks, Muskogee, Oklahoma

City building in the West and Southwest is such a highly commercial development that too frequently we find the skyscrapers occupying all the available space before any one thinks, or has time to act, on the necessity for developing the aesthetic, in the way of parks, playgrounds

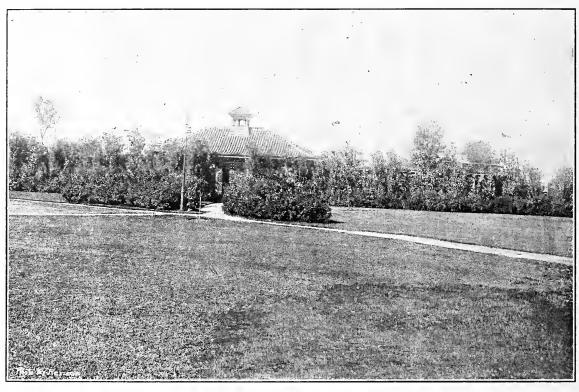
Muskogee has just begun its park work. The success of the past has assured a most comprehensive work for the future.

All of the park improvement that has been done covers a period of less than two years, but the results attest what a magnificent soil and cli-

a distance of four miles, and at the juncture of the Arkansas, Grand and Verdigris rivers.

This makes the most comprehensive system of park improvement outlined and approved by any city of this size in the Southwest.

It not only will furnish breathing



REST HOUSE AND PERGOLA IN A MUSKOGEE PARK; DESIGNED BY CHAS. A. BUTTERFIELD,

and boulevards. In this respect Muskogee, Okla., is the exception among the cities of the Southwest.

In 1900 Muskogee was a town of 5,000 people, with no parks and no title to land, not even to the lots on which brick buildings, banks and mercantile establishments stood. To that period the town had been built on hope and faith. Today Muskogee is a city of 35,000 people, and, along with its ten-story buildings and everchanging skyline, it also has sixteen parks, eight of them highly improved, embracing a total of ninety-four acres, and eight miles of 80-foot boulevard, improved.

So rapid, and so satisfactory has been this improvement that I am told by all classes of business men that the public parks and boulevards are the greatest public asset the city has, because every person in the city and every visitor must see them; and

mate eastern Oklahoma possesses for highly specialized park work.

The park board now has under contemplation a plan, the details of which are being worked out, whereby the total park acreage is to be brought up to 347 acres by donations and purchase of desirable park sites within a radius of five miles from the center of the city, and the boulevard system to probably eighteen miles in length.

In this connection I pay tribute to the magnificent spirit of Muskogee town builders when I say that for several parks that have been acquired and the eight miles of boulevards built, title has been secured without the expenditure of the city's money, except for surveying.

A very popular boulevard, of which three miles is completed, will be known as River Drive, running north from the city to the Arkansas river, places for a large population, but will place a park, large or small, within fifteen minutes' walk of practically every home in the city.

To accomplish all this the city will in all probability vote \$150,000 in bonds in the spring.

And in addition to this, private citizens have agreed to donate for a boulevard three miles long, a strip of land 300 feet wide along Coody creek, including 38 acres of heavily timbered ground, which fills in a gap of the boulevard system.

The park board is picking up here and there all over the city a block or triangle at street intersections whenever it can be obtained at a reasonable figure, and will convert these into "inside" parks so that the benefit may be evenly distributed over the city.

The park improvement work has included the establishment of play-



BEFORE: GRADING SPAULDING PARK, MUSKOGEE, OKLA., APRIL, 1909.

grounds in some of the improved park ground, and these have cemented the friendship of every child and the parents of every child to the park work. They are immensely popular.

The playgrounds are under the

joint control and supervision of the park board which consists of three members serving without pay, and the Playgrounds Association.

In one of the largest and most wading pool 40x60 feet has been built.

It is kept filled with running water from one to twenty inches in depth, the overflow running into the artificial lake near by. Thousands of little feet and legs are cooled daily highly improved parks a concrete - during the summer months in this pool.



AFTER: SPAULDING PARK IN AUGUST, 1911.

The parks have been improved with permanent construction. They have been thoroughly sodded, planted in trees and shrubs and driveways, and walks, pergolas, rest houses and comfort stations have been built.

In the two miles of central parkings on the streets I have planted sycamore trees, and we get magnificent results from these trees in this climate. In the parks elms, maples, sycamores, poplars, locust, Catalpa Bungei, Paulownia imperialis, Chinese umbrella, and the different species of willows will be found.

The shrubs that I have used in planting in our parks embrace a wide

variety, and this improvement is what has caused so much favorable comment.

A few of the shrubs that do well here are as follows: Barberry, cydonia, desmodium, deutzias, euonymus, forsythia, altheas, hydrangeas, all kinds of privet, loniceria, Rhus glabra, Rhus typhinia, laciniata, sambucus, spireas, symphoricarpos, syringas, tamarack, viburnum, flowering willow and Japanese roses.

A great many hardy perennials do well, particularly the hollyhocks, double and single, hibiscus, Iris and phlox.

I have used an abundance of an-

nuals each year to lend variety and color to the shrubbery beds and borders, planting largely of petunias, zenia and marigolds.

Muskogee, like most towns of the Southwest, is built on a prairie. It was thought that trees, shrubbery and flowering plants would not thrive. This conception has been thoroughly reversed in Muskogee. The evidences of it are not only apparent in the parks, but in the large number of private grounds that are being improved.

I have never known a place where so great thrift is shown by so large a variety of plants as in this soil.

OUR NATIVE HERBACEOUS PLANTS FOR PARKS

It is a lamentable fact that our native flora is vanishing as surely as the fauna, and many most beautiful flowers once common in the fields and woodlands are seen no more. Conservation may well be practiced in every community containing a park so that a bit of the pristine beauty will be assured, though the axe and plow are fast eliminating it in the surrounding country. Most plants indigenous to any community will find a congenial spot in its parks, and the pleasing effect thus obtained will many times repay the labor, while the advantages of thus preserving the local flora from extermination should be sufficient motive for careful effort. In the Arnold Arboretum at Cambridge, Mass., there is an attempt to gather together every plant and tree hardy enough to endure the latitude of Boston. The more modest collection of indigenous plants should prove in some ways as satisfying, though less pretentious.

The mountain town of Kane, Pa., is the proud possessor of a large tract of virgin forest set aside for park purposes; and one of the first improvements was the transplanting of hundreds of rhododendron from the Allegheny slopes not many miles away. While the rhododendron, and its near kin, the laurel and trailing arbutus, will not thrive in every locality, there are many substitutes adapted to any location, some of them equally beautiful.

Many spring flowering bulbs may be safely transplanted when in full bloom, though just after blooming is the preferable season for this work. Notable among them is the Spring Beauty, one of the earliest and most dainty of vernal blossoms, the carmine-striped flowers being always admired.

The yellow adder's-tongue, with its beautifully mottled leaves and graceful lily-like blossoms, will soon take possession of any shaded knoll, rendering it a thing of beauty during the spring months. Only bulbs large enough to send forth two leaves are of flowering size, yet blossoms are produced in cultivation as freely as in nature, popular opinion to the contrary. The pied leaves fade soon after the blossoms wither, the entire plant disappearing as the sun heat becomes more intense, leaving the ground to the summer bloomers.

A rocky bank is an ideal spot for the wild columbine or aquilegia. The single native species of the east, a combination of coral and pale yellow, is extremely graceful in outline. The large yellow species of the Rockies may be introduced with excellent effect. The plant is perennial, and when once started it spreads rapidly, seed being freely formed.

The mandrake, Peodophyllum peltatum, is of such peculiar form as to attract wide notice, the umbrella-like leaves being no less interesting than the waxy blossoms. Its stout rootstock is easily acclimated to any rich self

Violets thrive in almost every location. The great stemless blue ones delight in a grassy plot, while the large white V. Canadense frequents moist woodlands. Some of the species grow so rank that they will soon crowd out other plants,—but, one can scarcely have too many violets. Give each species a plot by itself.

Some plants thrive more vigorously in a richer soil than in their native habitat, notable among these being the meadow or Canada lily, the red and yellow spotted spikes of which are extremely graceful in outline. While most frequently found in meadows, it is readily adapted among the shrubbery.

The False Foxglove, with its clear yellow petals of waxy consistency may lure the lover of the beautiful. But the landscape gardener will do well to strive by every possible means to preserve it in its native haunts; for being partially parasitic in habits, it cannot be successfully transplanted.

The intense red of the cardinal flower is a pleasing addition to the landscape of late summer, but unless moist ground is available there is little use in attempting to grow it. But less exacting is its close companion, the spotted touch-me-not, which thrives equally well on dry land. The flowers are interesting in form and color, while the curious contortions of the ripened seed-pods when touched suggest the name and show vividly at least one device of nature for scattering her treasures.

Some of the golden-rods are so aggressive in habits than they can scarcely be recommended, no matter how much we may admire their magnificent plumes. Notable among these is Solidago Canadensis, the suckers of which rapidly crowd out all other vegetation. But S. caesia more slender in growth, is never a weed.

Every locality has its own possibilities; its distinctive flora; and this, first of all, should be regarded. Study plant ways in your own woods and fields, and you will find many deserving a permanent place in your parks.

BESSIE L. PUTNAM.



In anticipation of a great increase in the number of visitors to the national parks during the season 1915, when the Panama-Canal Exposition will be held in San Francisco, the Department of the Interior is reported to be planning extensive improvements in each of the parks, especially those in the Pacific Coast States. The work in contemplation in the Mount Rainier, Crater Lake, General Grant, Sequoia and Yosemite parks includes the repair of old roads, the construction of new ones, the cutting of trails, the building of bridges, the installation of new road sprinkling systems and the extension of the old ones, the construction of water supply and sewerage systems and general development. It is the intention of the department to make more places in the parks accessible, and to render travel more comfortable.

Detailed plans and sketches of a permanent park and boulevard system for Salt Lake City, Utah, which will provide the city with an elaborate and upto-date system have been approved and adopted by the board of park commissioners to be carried out in the future as rapidly as the financial condition of the parks department will permit.

The Civic League of St. Louis, Mo., recently opened fire on the movement for overhanging street signs. The first shot was a report of the Signs and Bill-boards Committee of the League. This report, which has been approved by the Executive Board of the League, asserts that the repeal of the present ordinance restricting projecting signs to within eighteen inches from the building line would greatly increase the danger to life and property.

The Washington, D. C., District Commissioners' plan for the purchase of land to be used as public parks and to be appropriated for from year to year has received the indorsement of the Chamber of Commerce, Its committee adopted the following resolutions: "Congress, during recent sessions, having been unwilling to appropriate for the purchase of land to be used as parks in the District of Columbia, the Chamber of Commerce, therefore, indorses the plan of the District Commissioners to provide for the purchase of land for park purposes in the District of Columbia appropriation bill from year to year, and in recommending the item for park purchases in the estimates to Congress

the Commissioners of the District of Columbia should follow the plan as provided for by the park commission, such plan having heretofore been opposed by Congress."

The Winston-Salem Board of Trade has inaugurated a movement to establish a system of parks and a strong committee of representative citizens has been appointed for the purpose. The city has already started parking a beautiful site on West End Boulevard. A chain of small parks is contemplated, with a large centrally located park, to be accessible to all the people.

The park buying campaign of Grand Rapids, Mich., is practically over and the \$200,000 voted by the people will probably have added about 140 acres to the city's park area, at an average price of about \$1,400 an acre. The improvement of this property will take time and patience, especially as the amount of money available for park improving purposes will never be large in any one year. The improvement of the thirty-acre annex to John Ball park is well started, but there is much work to be done on it yet. The reservoir hill property probably will be the next to receive large attention. Plans for the improvement of the other newly acquired lands will be made as rapidly as possible. Grand Rapids has a park board alive to up-to-date activity.

The park board of Mason City, Ia., has been criticized for its lack of business methods in a report submitted to the state municipal accounting department by one of the inspectors. The report says that the inspector is disappointed in the methods of the park board and recommends that it adopt a stricter business policy. Otherwise the report says that Mason City is well governed. This is good; let us have business methods in park work wherever possible.

The City Hall Park, New York, has lost its last Ailanthus tree, as with its mates of the past it suddenly toppled over recently and pinned several people under its branches. It is an oriental tree which seems to have done well in Europe but in this country after a certain life, it grows brittle at the roots and a gust of wind either breaks it short off, or uproots it.

It is practically certain that the area of Fair Park, Dallas, Tex., will be in-

creased in the near future by twelve and one-half acres of land. This will be a substantial and permanent improvement to the public's great playground. The Fair Park is now about 138 acres in area.

The Metropolitan Board of Tacoma, Wash., expects to spend \$10,000 yearly along Cliff avenue. The Northern Pacific Ry. Co. has been negotiating to deed to the board the entire bluff between Cliff and Pacific avenues from 7th street north. This includes quite a piece of land. "The improvement of Cliff avenue property which the railway company intends to give the Board and the construction of a boulevard through the strip is just one step in the right direction," says one of the Commissioners. "The park area of the city is great enough now. What we need is more and better road connections between, them."

The Frank T. Howard Improvement Association, New Orleans, La., is developing a plan to convert the old circus lot in Canal street, between Dupre and Gayoso, into an attractive park.

The Park Board of Virginia, Minn., is planning to spend \$25,000 next year in improving and enlarging the park system.

Mr. O. C. Simonds, landscape gardener of Chicago, Ill., while in Quincy, Ill., recently, inspecting the park system, much of which he has designed, called attention to the fact "that the park idea is spreading all over the country," and cities and towns are taking more interest in the beautification of their environments than ever before in the history of the country. Parks and boulevards, parkways, and pretty lawns are no longer looked upon as ornaments and luxuries to be enjoyed by the wealthy. Rather they are looked upon as assets with a real tangible value and as such, quite as much as for their aesthetic value, are to be fostered and developed. All of which is another good sign of the times.

The Supreme Court of New Jersey has recently awarded to a citizen of Merchantville, N. J., \$1,500 as damages for the loss of four shade trees by escaping illuminating gas. The defendant was the Public Service Co. of that state, who bitterly fought the case. Thousands of trees are destroyed annually through carelessly laid gas mains.

The Municipal Park & Development Co., Oklahoma City, Okla., of which Mr. Will H. Clark, organizer and former head of the board of that city's park system, is president, has recently issued a pamphlet describing the Ames Park addition to Oklahoma City, which

by the aid of a competent landscape architect is to become a high-class residence district. The publication gives a finely illustrated idea of the thrifty and prosperous city, and with text to further describe what has already been accomplished in building up and what may be expected in the near future. The idea of developing real estate projects on lines of civic progress must now be followed in all progressive localities.

NEW PARKS

Miss Helen E. Chase has given to Waterbury, Conn., the old Waterbury hospital property comprising seven acres of land and the old hospital buildings as a memorial to her mother, Martha Starkweather Chase. The property adjoins A. L. Chase park and is valued at \$100,000. Miss Chase requests that the buildings be preserved as a place of rest and recreation for the people.

The Hudson County, N. J., Park Commission is laying plans to acquire the Suckley estate for a county park. The property lies on the boundary line between Jersey City and West Hoboken. It is located on the crest of the Palisades, overlooking the Hudson River.

A deed has been passed transferring to New Brunswick, N. J., for a city park eighty-eight acres of land owned by Anthony Dey, a New York business man, whose home is in New Brunswick. The property is located between College avenue and the landing bridge and is valued at \$150,000. Mr. Dey who inherited the land from Judge Charles Scott, his uncle, is about eighty years old and has no direct heirs. He preferred giving the land to the city rather than have it cut up and its historic value destroyed. The house upon the property was constructed nearly a century and a half ago and was named Buccleuch, after the Duke of Buccleuch. There is sufficient ground for a baseball diamond, tennis courts and a fine lot of woodland for a park.

Mr. A. B. Farquhar has donated to York, Pa., some seven acres of land of the Jordan farm for a recreation park. A wading pool, skating pond and other desirable features will be made. There is a prospect of the gift of an adjoining acre to the above by Miss Anna L. Gardner, which will improve the boundaries of the Farquhar gift.

Some twenty acres of a tract owned by the Ensley Land Company, of Birmingham, Ala., has been selected as a site for a park for the Ensley residents.

A twenty-acre tract of land in the very heart of Laurel, Miss., which has been donated by the Eastman, Gardiner

& Co. lumber concern, is to be converted into a public park. The land is valued at \$100,000 and it is specially stipulated that it must be used exclusively as a public park.

A new west side park is assured for Detroit, Mich., the council having authorized the issue of bonds to purchase the site.

The Ladies' Civic Improvement Club in co-operation with the city council of Lebanon, Ore., concluded a deal for a 25-acre park tract. The site includes a butte across the Santiam river, which will afford fine views.

In a recent election at Deadwood, S. D., it was voted to buy a site for a public park on which an auditorium will at once be erected. The principal pledged contributor to the auditorium is Mrs. Edward H. Harriman, of New York. The park and auditorium will cost over \$50,000.

Announcement is made that Wallingford, Conn., is soon to be the recipient of a two-acre park tract in the town, the gift of the Robert Wallace estate. It was mentioned at a banquet by Mr. Frank A. Wallace, president of the R. Wallace & Sons Mfg. Co.

The new lake shore park of Milwaukee, Wis., to be created on made land, will not only be a beautiful shore park, but will be completed sooner than expected, more funds being available.

The city council of Upper Sandusky, O., has decided to preserve a historic spot that for over fifty years has been totally neglected. It is on a bluff of the Sandusky valley and was once dotted with tombstones of Indian warriors, all of which have disappeared. The ground will be converted into a park with a memorial building in the center.

Hurd Park, the gift of Mr. John W. Hurd to Dover, N. J., was ceremoniously dedicated on October 12. Plans have been made for improving the tract, which comprises six acres, located opposite to Mr. Hurd's home in the town. The only restrictions were that certain bubbling springs must not be destroyed and the site must be used for park purposes only, and to be known as Hurd Park.

One of the most desirable blocks of land in the town of Shiner, Tex., known as the Patton block, has been donated to that town by Captain Charles Welhausen for a public park. It will be named after the donor.

FROM PARK REPORTS

The annual report of the South Park Commissioners of the city of Chicago for the fiscal year ended February 28, 1911, is a record, as

usual, of a large amount of detail work executed in the way of improvements made and money expended, in the large interests taken care of by the South Park Commissioners. The peculiar season made the task of preserving the ordinarily natural beauty of the parks an onerous one. The South Park Commissioners are working rapidly towards eliminating the "middle man" in its park service. The refectories and lunch counters in the main and small parks are maintained and operated by the commissioners, and the ice cream is manufactured in the park's factory. Considerable economy is resulting in this branching out in park management. Among some of the details are: Nineteen skating ponds, aggregating 86° acres of ice, were maintained during the season; tennis courts to the number of 168 were taken care of and nets provided by the parks, while 64 courts were marked out for parties bringing their own nets; 51 baseball diamonds are regularly laid out and kept in condition. There are 122,961 trees and shrubs in the nursery. The statistical tables, which comprise a large part of the report contain an immense amount of valuable information, and in the matter of the value of small parks in the community, the figures representing the use of their facilities and the attendance, are truly astounding.

Some interesting figures are given in the eighteenth annual report of the Board of Park Commissioners of the city of Cambridge, Mass. Work on the Esplanade, which was begun in 1893, drags slowly along, on account of inadequate appropriations, yet there has been expended on this desirable improvement since the above date \$1,282,151.99. There is quite a demand for this thoroughfare. Paltry appropriations appear to be affecting the shade trees of Cambridge, too, and there is no question but that the financing of civic work and improvement should be placed on a more elastic basis so as to maintain adequate funds to meet all emergencies. The experience of Cambridge with its shade trees suggests that a comprehensive study of the street tree question for every city might be an economic matter. In spite of all that this city has done, something is killing off the elms and that quite rapidly, but the elm leaf beetle is about exterminated, due to the persistent efforts to conquer it. Some interesting views of the progress of the work on the Esplanade are given in the report.

PARK IMPROVEMENTS

The improvements on Del Paso Park, Sacramento, Cal., are progressing favorably. The winter's work, for which preparations have been making, will include the planting of some 5,000 trees of different varieties, mostly deciduous, the construction of about four miles of roads, and the sowing of possibly a couple hundred pounds of Bermuda grass seed.

The city council committee on public grounds and buildings of Minneapolis, Minn., has recently agreed to turn over the old city hall site in Bridge square for utilizing in connection with the proposed Gateway Park improvements. The park board was given permission to use and maintain the property, but the title will remain in the city.

The park commission of Fort Worth, Tex., has ordered 5,000 roots and bulbs for the down-town parks. These include flowers and shrubs which thrive here, and some which will be planted as an experiment. The park commission proposes to spare no pains to make its small parks specially attractive as well as to greatly improve the large park situated in the outskirts.

Newark, O., is starting on a campaign to improve city appearances, in connection with the Board of Trade. The Court House Park is to be improved and the dome illuminated. Shortness of funds such improvements is leading the business men to take a hand with a view of exploiting the city's advantages.

City Forester J. H. Prost of Chicago has sent a communication to the Special Parks Commission describing the work done in his department the past year and outlining that planned for the coming year. The amount expended in 1911 is as follows: Forester's salary, \$2,000; tree laborers, \$3,735; general supplies, \$300; teaming, \$310; total, \$6,345. Estimate for next year is \$29,000.

The proposed shelter house in Sunset Park, Evansville, Ind., on the Japanese style, will be a reinforced concrete structure, and absolutely fireproof. The building has been designed by Brubaker, Stern & Boyle, architects, to make it harmonize with the surroundings and it will be picturesque, as well as bright and cheerful, with enough color in the tile roof to give life to the site. The pavilion as planned will be an oblong struc-

ture, open on all sides, with an overhanging cornice. The roof is flat and designed for a roof garden and also for seating during band concerts. The band stand is located at one end of the building in a tower effect. Toilets are provided in the basement, both for whites and colored, there being four separate compartments in all.

Improvements to cost approximately \$5,000 will be made at Itasca Park, Minn., within the next year, according to estimates in the hands of W. T. Cox, state forester. Small rustic shelters are to be erected at Elk Springs, Rest Park and Beaver Dam, with open fire places in each. A cabin, boat house, wooden tower thirty feet high and combination cottage of peeled logs also are included. A log cabin in Burnside Park as headquarters will cost about \$400.

In the near future Milwaukee, Wis., will have a fine park on the lake shore between the harbor entrance and McKinley Park, and connected with Juneau Park by one or more bridges spanning the tracks of the Chicago & Northwestern road. A committee has been appointed by the Merchants and Manufacturers' Association to urge the city to provide a dumping place on the lake shore north of the harbor entrance. On the made ground created by the dumping of city waste an addition to Milwaukee's lake shore parks will be laid out.

Paterson, N. J., has awarded contracts for sidewalk improvements about all the parks to the amount of \$10,500. At Eastside and Westside Parks the surrounding paths have never been permanently improved. All the ground about the small breathing spots recently taken over by the city will be laid with proper sidewalks. Another work to be taken up is the improvement of Sandy Hill Cemetery properties, recently acquired by the city to be turned into parks, which will be done by city employees, as was the case with Wrigley Park, recently completed. The old Baptist Cemetery on upper Market street will inaugurate a system of playgrounds, and it will be improved to that end.

The park commissioners of Salinas, Cal., have decided upon improving the City Park.

It is planned to build a parkway between Castlewood and Shawnee Park, Louisville, Ky., the right-ofway having been practically secured. Mr. Fred Nussbaumer, superintendent of St. Paul's parks, will advise the state authorities in the matter of improving the new Ramsey State park near Redwood Falls, Minn.

Mr. Christian Jensen, landscape architect of Wichita, Kas., has recently completed plans for the Genda Park addition to Genda Springs, a mineral spring health resort of Kansas. The practice of employing competent landscape designers to lay out new town sites and additions is a healthy sign of the times and will surely pay.

In response to a petition from the East End Improvement Club, Bartlett Park, St. Joseph, Mo., is to be enlarged to double its present size, by the addition of ten acres on the south and the same number of acres on the east. The additional territory will be provided for in the ordinance establishing the southeast boulevard extension. The land to be acquired will be paid for by creating a benefit district.

The gift of park lands by Messrs. George Urban and William H. Walker to Buffalo, N. Y., many obstacles in the way of improvements will be removed. The property is in the vicinity of Springer Ave. and Scajaquada Creek. The gift is greatly prized.

Charles D. Lay, landscape architect of New York City Park Board, is at work on plans which will change the design of Battery Park to make it harmonize with the New Barge Office and the future Aquarium annex. The new plans include a scheme of tree planting to hide the elevated railroad tracks on the easterly side of the park and also the laying out of straight paths.

Mrs. Eugenia H. Bragg, widow of C. C. Bragg, recently tendered to the Cincinnati Park Board as gift all the property belonging to her in the Bloody run district wanted by the board for the proposed parkway. The tract embraces from five to six acres of irregular dimensions, lying east of Dana avenue, Avondale, and will give about 2,000 feet of park boulevard. The board had ordered the condemnation of the entire Bloody run park scheme, but when the city solicitor's office took the acquisition up wth Mrs. Bragg she made the handsome offer to donate to the city what was wanted of her property.

The steel town of Gary, Ind., laid sand dunes on the shore of Lake Michigan, is fast changing its landscape, out almost in the midst of the Indiana dunes will be the East Side park. The sand is being covered with black earth, and the work of planting has been vigorously carried on.

TANDS CAPE GARDENING

QUICK TRANSFORMATION OF UNSIGHTLY CORNERS





THE TIME, NOVEMBER 2. 1911, THE PLACE AND THE THE SAME PLACE MINUS THE DIRT. NOVEMBER 5, 1911. DIRT.

Where intersecting streets make triangles or other small areas of irregular shape, their unfitness for conventional real estate uses often leaves them neglected and unkempt for years. They are readily and frequently desecrated with billboards, overgrown with weeds or piled with refuse

These little odd areas offer excellent material for ornamental effects and where they are controlled by the park authorities have made admirable sites for fountains, monuments or plantings.

A striking instance of how these little park areas may become valuable

and characteristic parts of the city's park system may be seen in Washington, D. C., where the "circles" at street intersections have been admirably used in fine vistas and monumental effects.

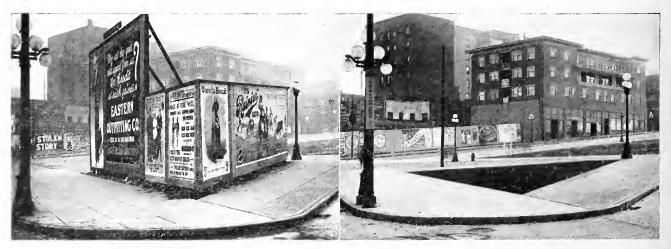
The illustrations herewith show before and after effects in a quick transformation scene in two such little areas in Seattle, Wash. These triangles had become so unsightly that the city condemned them and turned them over to Park Superintendent J. W. Thompson.

The city had authority to condemn these intersections from the private owners, for the purpose of making a public square, assessing the cost against surrounding property.

The park board came into possession of the property November 2nd when the pictures showing the bill boards, and other miscellaneous litter were taken.

The pictures of the surfaced and sodded areas were taken three days later on November 5th and show what the park forces accomplished in two days.

This is an excellent example not only of the Seattle spirit of "doing things and doing them now," but also of what to do with street corners that have become eyesores.



A CORNER IN SEATTLE BILLBOARDS, NOVEMBER 2, 1911. THE SAME CORNER NOVEMBER 5, 1911.

WHERE AND HOW TO USE FORMAL GARDENING

BY F. A. WAUGH

In years gone by there has been much heated argument in America and in England over the comparative merits of the formal and the natural styles of gardening. It has been considered to be decided that the natural style is the English style, and also that it is the one most popular in America and best adapted to our country, our climate, our land-scape and our social conditions. In other words many people think it a settled proposition that the natural style is the one for America; and then some people jump to the further conclusion that the formal style is undesirable or wholly inadmissible.

If it is merely a matter of taste, then there can be no further argument,—de gustibus non disputandum. And in many instances it is truly a mere matter of taste. If any man or woman will make a garden, and if there are no circumstances which make either style particularly appropriate or inappropriate, then he or she should be free to choose. However, much some critics may assure us that the formal garden is always best, or other cranks may assert that the for-



PUBLIC SQUARE IN BERLIN.

mal garden is always wrong, these extreme views must appear to reasonable people to be quite untenable.

The simple fact is that the natural style is better adapted to large parks, public reservations, great estates, etc., while the formal style is better adapted to small private gardens, especially such as are enclosed and are in close proximity to the house. We are now having built in America a great many formal gardens, and the only question which we may ask is whether they are located in fit surroundings, and whether they are correctly designed. For the fact is that some of these so-called formal gardens are horribly designed. They are made by men (and often by women) who know nothing about gardening, nothing about architecture, and nothing about the general principles of design. What we really need in this connection is a better appreciation of the formal style, a closer study of its adaptations, and a more thorough going knowledge of the principles of structure which underlie the design of formal gardens.

The formal style is particularly adapted to the small public parks or small city squares now being developed in all enterprising cities. Naturalistic gardening is out of the question in such surroundings, while the formal style may be easily employed to secure harmonious and pleasing effects.



A SIMPLE FORMAL ARRANGEMENT.

This is nowhere better to be seen than in the modern German cities, like Berlin, Frankfort and Cologne, where public improvements of this sort have been going forward with a real artistic frenzy for the past ten years. In one of the pictures shown here we see a view of a typical square in the new section of Berlin. The place is ornamented with a dignified stone belvidere, with stone seats, and marble fountains, but it has also a wealth of shrubs, climbers and attractive beds of tulips and other flowers, and wide stretches of well-kept green lawn.

In private gardens the formal style reaches its best effects only with the expenditure of considerable sums of money. It is not a fact that the formal style is necessarily expensive; but it is true that the owner can spend all he has on a very small formal garden if he tries to reach a high pitch of beauty.

Summer houses, temples, pergolas, fountains, sundials, sculpture, seats, water basins, and all the other beautiful elements of such a garden can hardly be omitted altogether, and if furnished to any attractive scale they cost heavily. Another picture shows a first rate example of the sculptured fountain, with a very attractive background of foliage, such as is almost necessary to give a formal garden its proper charm. In the third picture shown we have a simpler style of ornament, but even such a vase as that shown here will cost from \$100 to \$1,000; and even the clipped arbor vitaes are not to be had for a song nor to be maintained without labor.

There are many people in America today who can afford to indulge their taste in formal gardening. Where they show real taste, where they choose appropriate locations for their gardens, when they adopt logical plans, and when they carry out the plans with sufficient richness of detail and keep the whole in neatness and order, the results are very gratifying.



SCULPTURED FOUNTAIN IN A FORMAL SETTING.

WHAT TO PLANT for NATURAL LANDSCAPE EFFECTS

From an Address by E. Bollinger, Before the Illinois State Horticultural Society

In the old style gardening we find the arrangement to be formal, but the upto-date gardener labors for the variety in form and for harmony of the whole. Nothing seems to be easier than to arrange a few trees in the form of a natural and beautiful group, and nothing really is easier to the practiced hand. Yet experience has taught that the average gardener in ornamental planting, almost invariably crowds the trees into a close, regular clump or rows which has a most formal and unsightly appearance, and so much different from the easy, flowing outline of a group of trees or shrubs as they should be planted. Natural groups being formed by trees or shrubs of different distances and sizes, and at different distances from each other, often two or three by a mixture of those of the largest size with others of inferior growth, are full of variety in their outlines and from the same causes no two groups are exactly alike.

Compare the natural or properly planted groups of trees with one of the same age and growth, planted nearly at the same distance in a regular form and nearly alike in every respect, you will find the natural groups are full of openings or hollows. Trees advancing before or retiring behind each other, producing a variety of deep shadows and brilliant lights; in walking about them the form changes at every step; new combinations, new lights and shades, new inlets present themselves in succession, and this, of course, cannot be accomplished by one who has never studied along such lines of work.

In many places where new residences are built, or where old ones are to be improved, the grounds will often be found, partially or to a considerable extent, clothed with belts or masses of wood, either previously planted, or preserved from the axe. How easily, if good judgment is used, we may turn these to advantage in the natural style of gardening; and by judicious trimming when too thick, or additions when too much scattered, often produce good effects in the most magical manner.

Planting and grouping to produce the beautiful, fullness and softness of outline, and perfectly luxuriant development is absolutely necessary. This is accomplished by choosing mainly trees of graceful habit and flowing outlines; the after treatment of trees, where the beautiful is aimed at, should be pruning with great care, and indeed scarcely at all, except to remedy disease or to cor-

rect a bad form. The luxuriance and development of the trees should be encouraged by good soil, and repeated manurings where the soil is poor.

manurings where the soil is poor. To produce the natural and picturesque, which is practically the same, the landscape gardener will depend mostly on irregularity. The grouping therefore, must often be done in the most irregular manner. He will rarely, if ever, use single specimens, as every object should seem to connect itself with something else, and the grouping should be more of the wildness of the finest and most forcible portions of natural woods or forests, planting the trees closely and irregularly. These will grow up into wilder and more striking forms, the outlines will be distinctly different from one another and the limbs sometimes twisted and irregular. The outlines should be intermixed with smaller undergrowth of similar character, flowering shrubs, etc. Sturdy and bright vines such as bittersweet, honeysuckles, clematis, virginia creepers, trumpet vines, all of which should be allowed to clamber over occasional trees in careless manner. The grass should be allowed to grow in a careless and loose state, like that of tangled dells and natural wood. The eye should rest on softly rounded masses of foliage, or single open groups of trees, with finely balanced and graceful heads and branches. A broken or crooked limb, leaning trunk, or several stems springing from the same base are frequently peculiarities that add to the picturesque. For this reason the gardener desires to encourage a certain wildness of growth, and allows his trees and shrubs to spring up in thickets to assist this effect; he tries to accomplish occasional irregularity of stem and outline, he admires a twisted limb or a moss covered branch or trunk of a tree, and in pruning he therefore is careful to leave precisely what in formal specimens would be the aim to remove; in other words he would direct his mind towards increasing the natural, striking and peculiar habits of trees and shrubs. The amateur will easily see that planting, grouping and culture to produce the beautiful and harmonious, require a less artistic eye but more care and attention than performing the same operations to elicit the picturesque and natural effect.

We cannot help but admire a beautiful lawn, a refined and polished landscape garden with all the richness and beauty developed by high culture; we admire the beauty of form, the selection of trees, shrubs and flowers: we admire the graceful curved walks and drives, the silvery waters of the pond, the little winding brooks that sometimes adorn our modern places where water is plentiful, but in the natural landscape garden there is more effect and more striking growth and combinations which we feel are not only work but the work of an artist. One who has not studied nature with an artistic eye and who is not capable of imitating in his plantations the natural in its many variations, should consult those that know. To accomplish the natural we generally look for a comparatively wild or wooded place and I may safely say that if such a place is on hand and if the gardener has the true feeling for his work, he will always find it much easier than if he would strive to produce an ornamental effect, as the majority of the places to be planted for the beautiful must begin nearly anew, choosing places not for wildness but for openness, sunny plains, planted with more of the formal stately trees and shrubs.

Any person who will take the trouble to reflect for a moment on the great diversity of surface, change of position, aspect, views, conditions of soil, residences, public streets, climate, etc., will at once understand how difficult, or, indeed how impossible it is to lay down any fixed or exact rules for arranging plantations of small or extensive estates or parks. What would be adapted to a hilly rolling estate would often be found entirely unfit for adoption in a smooth, level surface and the contrary, and yet the two following principles should be constantly followed and kept in view; namely, the production of the whole landscape and the proper connection of all the different parts or details. All grounds to be laid out, however, large or small, call for the exercise of good judgment and taste.

The house should be the chief or leading object, should form, if possible, the central point and should be given importance; groups of trees should form the background; and where outbuildings approach the same neighborhood or belong to the same party, should be hidden by planting from the main edifice. I do not mean by that a thick wood should be planted around the building to impede the free circulation of air and shut out the sunlight so

necessary for our health, but the object can be easily produced by a comparatively loose plantation of groups of trees and shrubs, so as to give all the effect of a large mass, and will form a screen at once and yet will have a graceful ornamental effect and will give dignity and importance to the house, and all objects not desired kept out of view. A good proportion of evergreens should be used both for the purpose of shelter, richness of color, ornamental effect and sweet healthful aroma. No large growing trees or shrubs should be planted too near the house, as they will make the house damp; small growing evergreens and shrubs I consider preferable. The lawn should approach the house, and its richness of green should be seen from the principal parts of the house. In the lawn appropriate places will be found for a number of trees, single or in small groups. Diligent care and study is the principal factor in planting the single as well as the groups of trees and shrubs, and so placed that they will not at some future time interrupt or disturb the finest views.

Persons who have a small cottage place, a 50 or 100-foot lot, and try with very little expenditure to improve their grounds in a tasteful and pleasing manner, I would advise to use simplicity; plant native trees, a few vines around the porch, and perhaps a few

shrubs to hide any possible outbuildings. The rest of the ground should be given to lawn and perhaps to one or two annual flower beds in the front lawn.

The most tasteless and unsatisfactory places are those that are overplanted and those in which without any definite aim everything is attempted; a mixed jumble of discordant forms; forty-seven varieties or more of trees not yet acclimated arranged in one style or another without the least feeling of unity; planting without taste and the improper selection of material. Native trees, shrubs and flowers that have proven to be perfectly hardy beyond doubt should be exclusively used in the small cottage grounds and I would advise to plant such varieties as found in your localities. In the parkway or socalled street planting in front of the small suburban lot, in case there are trees planted at all, use the American White Elm or Sugar Maple. If you desire quicker results, plant the Soft Maple or Carolina Poplar between the elms or maples as a nursing tree; cut them out when they interfere with the permanent trees. Should the parkway be partially planted with trees and only one or two trees are required, plant in harmony with the others; in other words, use the same variety of trees if possible. In the arrangement of large extent of surface where a great many trees are required the variety of plants may be larger and such naturalized foreign trees as the Horse Chestnut, Lombardy poplar, Ailanthus, Sycamore, Maple, English Elm, Oriental Spruce and Arborvitae, English Yew, Japan Juniper, Normandy Spruce, English Hawthorn, etc. These, however, should not be used as fundamentals. Our American sugar maple is superior in many ways to its European rivals. Compare the White Elm with the European varieties, Huntington, Dovie, Superba, etc.; the American variety with its elegant graceful pendant branches, the European upright, stiff, formal. I have no doubt that you have streets - planted with European Elm; no doubt you remember the effect. Compare, if you will, an avenue planted with the American White Elm with its branches arching over the street and the European stiff, upright, unattractive. Where large trees and many of them are required for natural planting we should give preference to our American Oaks. The oak grows slowly the first five or six years, but after that it grows very rapidly. The oak is one of our most beautiful and useful trees for ornamental planting, and even for street planting. I would recommend it and especially the White Oak, Burr Oak, and Pin Oak.

HOW TO SAVE THE DYING HICKORY TREES

Within the past ten years a large percentage of the hickory trees have died in various sections throughout the northern tier of states from Wisconsin to Vermont and southward through the Atlantic States to central Georgia and to a greater or less extent within the entire range of natural growth of the various species.

While there are several and sometimes complicated causes of the death of the trees, investigations by experts of the Bureau of Entomology, U. S. Department of Agriculture, have revealed the fact that the hickory bark beetle is by far the most destructive insect enemy and is, therefore, in the majority of cases, the primary cause of the dying of the trees.

The first evidence of the presence and work of the beetle is the premature dying or falling of a few of the leaves in July and August caused by the adult or parent beetles feeding on the bark at the base of the leaf stem, but this work alone does not kill the trees.

The next evidence of its destructive work is the dying of part of a tree or all of one or more trees. If the trees are dying from the attack of the beetle, an examination of the inner bark and surface of the wood on the main trunks will reveal curious centipede-like burrows in the bark and grooved on the surface of the wood. These are galleries and burrows of the parent beetles and of their broods of young grubs or larvae. The girdling effect of these galleries is the real cause of the death of the trees.

The broods of the beetle pass the winter in the bark of the trees that die during the preceding summer and fall. During the warm days of March and April these overwintered broods complete their development to the adult winged form, which during May and June emerge through small round holes in the bark and fly to the living trees. They then attack the twigs to feed on the base of the leaves and tender bark and concentrate in the bark of the trunks and large branches of some of the living healthy trees and bore through the bark to excavate their short vertical egg galleries. The eggs are deposited along the sides of these galleries and the larvae hatching from them excavate the radiating food burrows which serve to girdle the tree or branch.

The following recommendations for the successful control of this bettle are based on investigations, experiments and demonstrations conducted by the experts on forest insects of the Bureau of Entomology during the past 10 years:

The best time to conduct the control work is between October 1st and May 1st, but must be completed before the first to middle of May in order to destroy the broods of the beetle before they begin to emerge.

The hickory trees within an area of several square miles that died during the summer and fall and those of which part or all of the tops or large branches died should be located and marked with white paint or otherwise.

Fell the marked dead trees and cut out all dead branches or the tops of the remaining marked trees which still have sufficient life to make a new growth of branches.

Dispose of all infested trunks and branches in such a manner as to kill the overwintering broods of the beetles in the bark; (a) by utilizing the wood for commercial products and burning the refuse; or (b) by utilizing the wood of the trunks and branches for fuel; or (c) by placing the logs in water and burning the branches and tops; or (d) by removing the infected bark from the trunks or logs and burning it with the branches or as fuel.

So far as combating the beetle is concerned it is unnecessary and a waste of time to dispose of trees or branches which have been dead 12 months or more, because the broods of the destructive beetle are not to be found in such trees.

Spraying the tops or branches or the application of any substance as a preventive is not to be recommended. Nothing will save a tree after the main trunk is attacked by large numbers of this beetle or after the bark and foliage begin to die.

The injuries to the twigs by this beetle do not require treatment.

The bark and wood of dying and dead trees are almost invariably infested with many kinds of bark and wood-boring insects which can do no harm to living trees. Therefore all efforts should be concentrated on the disposal of the broods of the hickory bark beetle, according to the above recommendations.

In order to insure the protection of the remaining living trees it is very important that at least a large majority of the dead infested and partially dead infested trees found within an entire community of several square miles be disposed of within a single season to kill the broods of this beetle. Therefore there should be concerted action by all owners of hickory trees.

On account of the value of the hickory for shade and nuts and for many commercial wood products it is important that the people of a community, county or state who are in any manner interested in the protection of this class of trees, should give encouragement and support to any concerted or co-operative effort on the part of the owners towards the control of the hickory bark beetle.

The Park Department has nothing to do with the street trees of Hartford. They are under the care of the Street Department. In some of the small squares adjacent to the streets I have watered plants and trees by preparing the ground ready for them and running the tank wagon early in the morning, allowing enough water for each plant or tree.

G. A. PARKER. Hartford, Conn. Supt. of Parks.

Practical Men for the Parks

Has the Association of Park Superintendents ever canvassed the various park departments in cities of the Union as to whether practical men are employed at the head of park systems? This association might do a lot of good if it would lay such question before the mayors of cities, stating its importance. I believe this association could do a lot of good in getting rid of politicians.—E. H. B., N. Y.

The question as to whether the American Association of Park Superintendents has ever canvassed the various park departments of American cities to find out whether the heads of such departments were practical men or not, can undoubtedly be answered by the secretary of the association.

Mr. G. A. Parker, superintendent of parks of Hartford, Conn., I believe, years ago, compiled a very complete list of park officials of the United States, but whether it gave the qualifications of the different office holders from a practical or any other point of view I do not know. The National Association, to the best of my belief and knowledge, has never made a canvass along that line, but the question of eliminating politics has always been a live subject at all the meetings.

That park adminstrations ought to be free from political control and interference, and that their executive officers should be practical and experienced men, it would seem to me is self-evident. A great majority of the members of the National Association are practical and experienced men, but they do not represent the number of American cities which should be enrolled in the membership list of the association. It is the endeavor of the association to enlarge its membership and to induce every city in the country to send its park officials to annual conventions and to have them join the association.

Literature on this subject, with urgent appeals for attendance, has

ASKED AND ANSWERED

An exchange of experience on practical matters by our readers. You are invited to contribute questions and answers to this department

Watering Street Trees

How can you get street trees sufficiently watered? C. B., N. J.

The only satisfactory method of watering trees in the ordinary park ways of our American cities, is by underground tiling, using perforated tiles where the tiling comes in close contact with the roots. Surface watering is not satisfactory, unless the parkway is very broad and depressed, so that water cannot run off. Most of the trees in the West Park System of Chicago are watered by having a street sprinkler made with a sprayer on one side only so that it can spray the parkway by following close to the curb. However, I do not consider this sufficient for the trees, but it keeps the lawn green. On a section of Jackson Boulevard, I installed an underground watering system some years ago, and I think this is the only way by which the trees can get sufficient water. Of course, by making out shaped depressions around the trees there would be less chance of the water running off into the gutter, but such a method makes the parking look unsightly.

JENS JENSEN,
Chicago. Landscape Architect.

During my incumbency of this office (the past 27 years) there has not been five hundred dollars expended in watering young trees, this office relying more on frequent cultivation of the ground about them. Watering is only resorted to in extremely dry weather, or on special occasions when it may be deemed necessary for the life of individual trees. Another reason why we have not watered trees extensively is the lack of funds, as it would be a very costly item to water several times in a season the 99,000 trees on our streets.

Trueman Lanham, Supt. of Trees and Parking. Washington, D. C.

Relative to the watering of trees on the streets of Brooklyn, I beg to state that it has been our policy to water the young trees planted on our parkways at least once a week during the summer months. The ordinary sprinkler was employed in hauling the water from tree to tree and a pail was used in getting the water from the tank to the tree.

Park Dept. of Aboriculturist.
Brooklyn, N. Y.

been sent to all cities with a certain population. I believe that this attempt to secure attendance to our conventions from all cities, if earnestly continued, will eventually have the desired results. It is at these conventions where the association can exercise its greatest influence. While many park superintendents are not practical men in park work, yet they are not hopeless politicians and grafters. Many of them are anxious and ambitious to become practical men, and they are entitled and welcome to the assistance which the practical men of the association can give them. It is not through the policy as a selfappointed and self-constituted advisory committee to tell the powers that may be (strangers to us) what to do and whom to appoint, that, in my opinion, our association can best remedy the evil of appointing and maintaining inefficient men in office. Our policy must be to teach through exchange of thoughts and experience, to enthuse through demonstrations of good work and service; to guide through consultations and discussion on up-to-date, important subjects, and to stimulate and maintain interest in good park service and adminstration through the medium of good sensible literature pertaining to our work.

It is, of course, true that in many cities politics control park administrations, and in nine cases out of ten where this is the case, the results are very unsatisfactory from every point of view, except the one of the politician or office-holder. Where such conditions exist it is a question whether the mayor of the city, who most likely is an appointee of the same political machine, would be the party to appeal to for a change of policy. Such an appeal would undoubtedly look to his honor as an undue interference from some busy-body who might better mind his own business. The same mayor, on the other hand, would, on his own inclination, change his policy from wrong to right if he is shown through practical demonstration and discussion what good park administration and good service means. Let us ask him to attend our conventions together with his park officials. Let us bring the aims and endeavors of our association to the attention of the influential associations of those respective cities, such as commercial, publicity, improvement clubs, etc. Let us invite them to some classified membership of our association and let them help us to increase our strength and influence in general so that we may be able to help them in

detail along practical and instructive lines.

Through such associate membership the association could be kept financially on a working basis, which would permit one of its officers to devote his entire time to the interests of the association. This would rcsult in the accumulation of a large amount of valuable information at headquarters from where same would be disseminated to all in need of it. The National Association would become strong and influential and will. through forceful demonstrations and enlightening information, accomplish what I believe the questioner has in mind.

Theodore Wirth,
Minneapolis. Supt. of Parks.

Concrete Benches in Winter

"Will concrete benches, settees, etc. break in the winter, in green-houses not in use?"—R, R., Mo.

I have never observed the action of the variation of temperature on concrete in this particular case, as I have never had green-houses out of use or without heat in winter. I, however, have had a good deal of experience with concrete garden furnishings, made both in winter and summer and which were used out of doors the year around. If the concrete article is made in such a shape as to not allow for expansion and contraction, there is bound to be a tendency to disintegrate under such conditions. To obviate this, the article should be arranged so as to provide for expansion joints, which can be made as a sliding joint and treated with asphaltum. Any great degree of expansion or contraction may be done away with by careful reinforcement which should be carried out along well accepted engineering rules as much in work of this character as in a bridge or floor slab. Hair cracks usually occur on the surface of smooth finished concrete. If, however, a rough surface is produced by bush hammering or by acid treatment, the cracks although visible on very close examination do not render the work unsightly or do they materially tend to weaken it. The water proofing of such concrete surfaces is desirable and will have a tendency to keep the moisture from entering the work to such an extent as to produce disintegration.

M. H. West, Chicago. Landscape Architect.

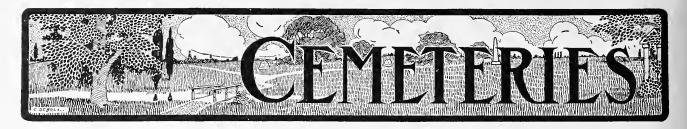
Plants and Trees for Central Florida

A correspondent writing to the Florist's Exchange, makes inquiry as follows, and is answered by W. F. Massey.

"Am just completing a five-acre slatted conservatory, with irrigating system, near Altamonte Springs, Fla., for growing Asparagus vine. Will you kindly advise me about the Olea fragrans and the Magnolia fuscata mentioned in the Nursery Department of the Exchange. Would central Florida he a suitable place to grow them? When plant and where obtain seeds or plants? How long after planting ready for shipment, cost, etc.? You would greatly favor me by giving full details, as I will act upon your advice. Again, if you would advise as to other profitable plants that would grow well in that climate for Northern or European markets would be glad to enlarge the conservatory." L. H., N. Y.

Oleo fragrans and Magnolia fuscata will be perfectly hardy in Florida, as I found them so in central North Carolina. You can get the plants from H. H. Hume, Glen St. Mary's, Fla.; from Reasoner Brothers, Oneco, Fla.; or from P. J. Berckmans Co., Augusta, Ga. The catalogs will give you the prices. Then in central Florida there are many other handsome trees that you can grow. The Camphor tree thrives well there: in fact, the most handsome Camphor trees I have ever seen are in north Florida, near the Georgia line, and Camphor is destined to be a profitable crop in Florida. I know one Camphor tree in eastern North Carolina, where it has been frozen back repeatedly, but always grows again in Spring, showing the comparative hardiness of the tree. You will need no conservatory for these things. The slatted cover will be useful for Cape Jessamines, to protect them from the winter sun; but these, too, thrive outside in eastern North Carolina For ornamental plants, the Chinese Fan Palm, Chamaerops excelsa, will thrive even better than the native Palmetto; I know a magnificent plant of this on a lawn in New Berne, N. C. The more tender bulbous plants such as Amaryllis, Nerine, etc., can be profit ably grown there for the Northern trade, and a skillful gardener could grow there the Roman Hyacinths that arc now imported from France. In fact, the list of plants that can be profitably produced in central Florida is a very large one. Under your shelter you can start Tea Plants from seed for transplanting, and tea culture is certain to increase in the South. The plantations near Charleston, S. C., have produced many thousand pounds of tea this year, the experimental plantation of the Department of Agriculture making 12,000 lbs, Asparagus

(Concluded on page XI)



CALCIUM CHLORIDE for DUSTLESS, DURABLE ROADS

An address before the Association of American Cemetery Superintendents, by W. G. Mortland, with discussion, by S. G. Howe, of Howe Chemical Road Co.

Calcium Chloride is a chemical salt which is highly hygroscopic and deliquescent, that is, it readily absorbs or imbibes moisture from the atmosphere while it, at the same time, changes from a solid to a liquid form. Solvay Granulated Calcium Chloride represents a purity of 75 per cent; i. e., to every 100 pounds of Calcium Chloride in its commercial form there are 75 pounds of material which is capable of combining with water. Repeated tests have shown this volume of Calcium Chloride will absorb 115 pounds of water when exposed at night or in the shade and 50 or 60 pounds in the glare of a noonday sun. The moisture lost in the heat of the day is restored during the night so that a road dressed with Calcium Chloride in the morning has the appearance of refreshing coolness. In theory one application of Calcium Chloride to a road surface would suffice to keep it dustless and compact indefinitely, but in practice we have found it necessary to follow along with more Chloride and this for the reason that after a time it penetrates the road to a point where its effect is lost to the surface. This difference between practice and theory in the application of Calcium Chloride opens up the field which it is properly your place to develop and in the telling of your experience with gravel, macadam, clay, cinder, tanbark, and other kinds of roads in conjunction with Calcium Chloride, we will in the end be able to determine pretty closely the merits or demerits of Calcium Chloride for road purposes.

There are two ways of applying Calcium Chloride, dry and in solution. For sprinkling it has been found that the maximum efficiency is attained by dissolving Calcium Chloride at the rate of 1 pound to each gallon of water, and a 600-gallon water wagon should cover not more than 2,000 square yards of surface. Ordinarily ten of these applications will keep the dust down for a season. When Chlo-

ride is used in solution it will be found better to fill the water tanks before the Chloride is introduced. If more convenient to do so the Chloride can be dissolved in tanks and siphoned into the sprinkler. This is but another variation.

As more Calcium Chloride is used in a dry form we have a particular interest in its application in this way and while much more could be said about the liquid treatment of road surfaces it is perhaps as well to go on to the larger question.

By way of preface to this broader discussion, I offer a number of general statements concerning Calcium Chloride, all of which have been verified either in the experience of the writer or in that of his associates. Some of these statements are self-evident and may be passed over quickly. On some of the others you may have something to say.

- 1. Solvay Granulated Calcium Chloride is white, clean and non-corrosive. When applied to a road it immediately absorbs enough water from the air and holds that water to bind the road compactly and keep it moist and dustless
- 2. It preserves the road from wear. Dust is wear and if there is no dust there is no wear. Dust also spells disease and where there is no dust there must be a close approach to perfect sanitation. Calcium Chloride is a splendid disinfectant.
- 3. Calcium Chloride costs less per square yard and requires no top dressing of gravel to absorb it.
- 4. It requires no water in applying but the dry material can be spread by hand or with a shovel, or by a spreading machine. This costs only one-quarter as much as a water cart.
- 5. It is colorless and entirely soluble in water.
 - 6. It is odorless.
- 7. It is absolutely non-combustible so that its storage involves no fire risk. If scattered upon a fire it tends to extinguish it.

- 8. Its shipment and storage requires no tank cars nor storage tanks, nor dirty inflammable barrels.
- 9. In rainy weather it does not produce a greasy mud, nor does the mud injure the paint of vehicles.
- 10. It is wholly without influence upon rubber. A rubber tire can be buried in dry Calcium Chloride, or in its water solution, for days, with no more effect upon the rubber than if it were immersed in pure water.
- 11. It is completely absorbed by the road's surface within a few hours after being applied and does not go through. a long process of "sloppiness" lasting for weeks.
- 12. It does not run into pools and form mud, but spreads itself through the surface of the road in the exact proportion in which it is applied:
- 13. If put on a hilly road it sinks into the ground where it is laid and does not run down hill.
- 14. A shower of rain improves the effect as the water produces a greater degree of uniformity in distribution through the road's surface.
- 15. By reason of its uniform action and the readiness with which it is absorbed by the road, it never produces a loose, flaky surface. Neither does the surface become mealy. It enters into the road and binds it compactly and lastingly.
- 16. When dissolved by prolonged rains and washed into the water courses it does not form a film on the surface of the water to accumulate and stagnate on the ponds and quiet water pools. On the contrary, being completely soluble, whatever portion is washed out of the road is diluted with large volumes of water so that it does not influence the water of the stream nor produce any injury to cattle or fish.

There are two main classes of roads which should be considered in this discussion, the level ones and those which run up to a gradient of 10 per cent or over. Beyond any doubt, in the experience of many of the gentlemen

present, Solvay Calcium Chloride ideally performs its functions on a comparatively level road surface making the road dense and firm and able to withstand heavy vehicle traffic and pounding rains without damage to the road. We have had some remarkable experiences in our treatment of grades and have found in every case where the road was laid carefully and the Chloride put down intelligently that after heavy pounding rains the treated surface held and the roads remained in good condition, showing conclusively that the Chloride has a binding property which is very beneficial. It is a result to be expected if one stops to think, for do we not set up the same condition in our treated road surfaces that has so often been observed on the ocean beach where the water-bound shore sand is so hard and dense a heavy vehicle can pass that over it without leaving any impression, yet this is the same sand which without its water-bond blows hither and thither, in many places laying in waste vast territories. The principle of the water-bound macadam is but another illustration of the same sort, and in the development of this question it may not be out of place to submit to you gentlemen whether or not oil is a proper treatment for macadam surfaces. You all know how macadam is laid and realize, of course, that the success or failure of such a surface is altogether dependent on the water bond which cements the individual stone to its neighbor, and it in turn to others until by and by there stretches out before us a splendid road ready for the ravages of the automobile and swirling air current. The surface of any road must be kept in place, and not be permitted to blow hither and thither or it is easy to see that in a short while our splendid thoroughfare will be in ruts and holes. It is a fact, and I know you gentlemen will agree with me, that no sooner is a macadam road completed and open to traffic than the builder's anxiety commences and he begins to thrust about for some adequate means of prolonging its life. Oil treatment is expensive and disagreeable, and so where this agency is employed enough oil is doused on the road to make it last as long as possible. Before a great while it may be observed that most of the oil has been squeezed off to the road sides, and later a tendency to dust and flake will be noticed, and in many cases, in my experience and yours, the life of the macadam road is measured by the time it takes the oil surfacing to lose its effectiveness. There are splendid reasons for

this if it is remembered that the underlying principle of the macadam road is its water bond which unites the whole surface into one continuous compact mass. When oil is applied to a macadam roadway experience has shown that the oil penctrates the surface to a depth of perhaps one inch, severing the water bond which can never again be re-established. Under these conditions a stone may be loosened and a ravel started which only the rebuilding of the entire road will repair. This is a reasonable argument because every day in the experience of road builders such conditions are met and we venture the assertion that it will not be a great while before oil dressings of macadam road surfaces will be a thing of the

We maintain and we think you will uphold us in a contention which has the approving seal of practical road builders that Calcium Chloride is not only a proper dressing for macadam surfaces, but it is the only one which will insure the maximum road life under conditions which are ideal so long as the road surface is carefully attended. When Calcium Chloride is applied to macadam the water bond is strengthened and by its use a road may be patched and the water bond be established at once without difficulty. Then, too, the road is always in a moist condition and its surface by virtue of this state is able to resist the traction of automobiles and the destructive suction which follows in their wake. It is a simple matter to keep on hand a few drums of Calcium Chloride which may be applied from time to time as a tendency to dust shows itself on your road. Vigilance is the price of a good road and where, even with Calcium Chloride, a dressing will not last for two seasons, two dressings a season will answer the average requirements. But right here be it known that each situation is a law unto itself and every user of Chloride must suit it to conditions as he finds them. The point we make is this, Calcium Chloride will not fail if intelligently applied. You, each of you, must suit its use to your local condition. That you fail to get the maximum of satisfaction from your first test is no reason for saying Calcium Chloride is not all we claim for it, but it is the best reason in the world for establishing new conditions and making another trial, because in the end you will have better roads and your cost of maintenance will be minimized. This goal all roadmen should earnestly strive to attain. You can nearly always see where the trouble lies, and if you go about it in an interested and common sense way your difficulty may soon be overcome.

Beyond any question Calcium Chloride is the best dressing known for gravel roadway. Some of your members will bear me out in this statement, and I trust they will come to my aid and tell you how they have been able to attain results which to me seem wonderful, and which, I dare say, were as great a surprise to them. Last year we sold the City of Duluth a sample carload of Calcium Chloride for use on a gravel boulevard. Up to the present we have shipped them this year between six and eight hundred tons.

When it is considered that Calcium Chloride has nearly all of the good features and scarcely any of the bad ones of other road dressings, it will be seen that it will be very difficult to make a fair comparison of cost. We think for the work it will do that it is the cheapest and most economical road dressing on the market today. We keep our roads moist and compact and in this way insure the maximum of life to the road. We pay road users large dividends of satisfaction because our roads are clean and sanitary. Calcium Chloride does not mess up clothes and carpets nor does it ruin automobile tires and paints. It is a good thing for you gentlemen from every standpoint as it is for all who are troubled with a nuisance of dust or are responsible for the good condition of road surface.

A Member—I would like to ask a question of the gentleman, and that is, if Calcium Chloride has any bad effect or disintegrating effect on a tar road?

Mr. Mortland—I would say that Calcium Chloride is not very successful if the road has been already oiled, that is a road that has been oiled, say within a year or two, because water in the Calcium Chloride and the oil do not assimilate, and I do not believe we would get very satisfactory action.

The President—I will now call upon Mr. S. G. Howe, of the Howe Chemical Road Co., of Detroit, Michigan.

Mr. Howe— Ladies, and Gentlemen: I have not come prepared with a paper to read on this subject of chemical road treatment, but will give you some of the points of my four years of experience and experiment along these lines, and, if time will permit, shall be pleased to answer any questions you may ask.

In the first place, I can vouch for all the good things claimed for this chemical treatment of roadways in the very able paper you have just listened to, but I disagree quite radically with the methods the company which this gentleman represents employ in use and application of this chemical. In their

application of it, they use it in its highest condition of refinement and, as near as I can learn, it costs between five and six dollars per ton to secure this stage of crystallization or granulation. and then costs about three dollars and fifty cents more per ton to pack it in the steel drums which they use and which are destroyed after initial use. thus entailing a first cost of eight to nine dollars per ton merely to get it into a convenient form for shipping when it must be brought back into its original liquid state before it is of any value as a dust layer or road binder. It seems to me that these initial wastes are unnecessary and inexcusable. My method is to ship the original liquor in as near its crude condition as it may be profitably shipped and do its work on the road, and to ship in tank cars which are returned without charge, and so you have no waste in package. This application is made by the ordinary water sprinkling cart. The only thing needed for results is a volume of chemical retained in this solution that will give the requisite action. When

put on in this liquid form the assimilation and attachment is almost instantaneous, while if the granulated chemical is used, 36 to 48 hours is required for it to dissolve with air absorbed moisture, and while it is going through this process of absorption and attachment, it will be picked up and carried on foot or wheel, and so it is desirable to close a street during this saturation if you want to be sure your chemical is to stay and do service as designed, and not be wasted or tracked.

Again, the Solvay Process circular says to just spread this chemical on and let Nature do the rest, but my experience has been that in some cases Nature will do its part altogether too These deliquescent chlorides, well. magnesium, calcium and sodium, all capable of abstracting and absorbing moisture from the air (they have this property in varying degrees from much to little in the order named) are virtually chemical sponges. They will absorb moisture rapidly, but also, like the sponge, with little moisture in the air they will dry out, and when dry will be of little value as a dust-layer or road-binder. You can readily understand that with the chemical spread and left right on the surface, this drvingout process will go on very much faster than if it is incorporated well within the top surface of the roadway-my method. This incorporation will interfere but little with the moisture absorption, but it will retard in a very large degree the rapid drying out of same, and so keep your roads in a good and dustless condition very much longer than the surface application will. But don't forget that when this chemical does dry out it needs an artificial wetting if you want to maintain perfect conditions at all times. Yet, if not convenient to give this artificial watering, if the chemical is properly spread and incorporated, your roads will be kept in good condition after each shower or rain ten times as long as they would remain so without treatment, so that in any case you will be assured of that ratio of benefit by the proper use of these delinquescent chlorides.

FINE MEMORIAL FOUNTAIN IN A CEMETERY

The Starr-Clement memorial fountain, shown on this page, is a fine

type of the exedra form of monumental construction, and an excellent piece of architectural granite work throughout.



STARR-CLEMENT MEMORIAL FOUNTAIN, BRATTLEBORO, VT.

The fountain was recently erected in Prospect Hill Cemetery, Brattleboro, Vt., and is the gift of Mrs. Nettie Starr Clement, of Brooklyn, N. Y., to the Prospect Hill Cemetery Association in memory of her parents and her husband, who are buried on nearby lots.

The exedra platform is nineteen feet in length and 5-4 wide, the basin is 6-0 in length and the height back of the basin is about 6-0. It is con-

structed of the West Dummerston, Vt., White Granite and was designed by C. V. Grant and built by the Chas. H. Grant Granite Co., of Brattleboro.

The fountain is supplied by the city water, which is maintained at a level in the basin by a float and ball-cock arrangement at the back of the basin. On the back, opposite the seats, the stone is cut away to make a place for setting pails, sprinklers and such utensils.

NEW CEMETERY STRUCTURES



NEW REST HOUSE, OAKLAND CEMETERY, ST. PAUL.

Oakland Cemetery, St. Paul, has recently completed a handsome new lodge and waiting room, illustrated herewith.

The building is constructed of Danville wire cut brick in the dark shades and the window and door trimmings are blue Bedford stone. The roof is of dark green, variegated slate, with gutters and water-leaders of copper, not painted. The inside walls of the ladies' waiting room are of brick, the same as the outside. The walls of the toilet rooms are of white tile and light gray Tennessee marble. The floor is re-inforced concrete, terrazzo finish in simple pattern of harmonious colors-grays. The entire interior woodwork is oak finished in early English style and the furniture is in the same style.

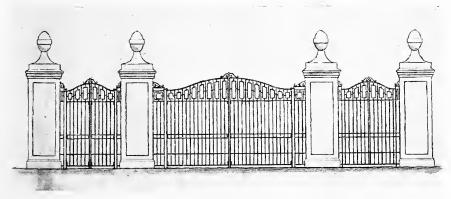
Thomas G. Holyoke is the architect, and Charles Skooglun, contractor. The building cost, complete, furnished, \$4,200. The lot owners and the cemetery management alike are

very proud of this refined little building.

One of the improvements made at the North Burial Ground, Providence, R. I., this year was to take down the old unsightly and high picket fence which was about 2,000 feet long, directly on North Main street with entrance at or opposite Rochambeau avenue, and replace it with a substantial Ibota Privet Hedge, the whole distance, with a new gateway about the center. This gateway illustrated herewith stands back from the line of hedge about thirty feet and will be planted with suitable shrubbery in circular formation from gates to hedge. The posts are four feet square at base and sixteen feet high and are made of fine cut Deer Island granite. The gates are of first quality soft rolled steel. The posts were furnished by the Kimball & Combe Co. of Providence and the steel gates by the Mueller Metal Co. of Providence. The foundations were put in by Superintendent James Warren, Jr., and the cost of posts and gates was \$4,000.

CEMETERY PROPERTY EXEMPT.

The Apellate Court of Indiana, Division No. 1, holds, in Greenbush Cemetery Association vs. Van Natta, 94 Northeastern Reporter, 899, that the intention of the legislature, as shown by the enactment of the association's charter and confirmed by subsequent legislation, was and is to exempt its property from taxation, regardless of its form or immediate use, so long as the property, or the interest or other earnings derived therefrom, are applied exclusively to the maintenance of the cemetery in accordance with the provisions of the charter. More particularly, the court holds that money of the association, loaned at interest, is not, under its charter and the laws of Indiana, subject to taxation. The court says that the policy of the Indiana law to encourage proper care of the places set aside for the burial of the dead, and to exempt from taxation the property of the organizations that accomplish this end, without pecuniary profit to any one connected therewith, is as firmly established, and equally as meritorious, as the policy which provides for equal taxation.



NEW ENTRANCE GATE, NORTH BURIAL GROUND, PROVIDENCE, R. I.

PUBLIC-SPIRITED WORK for the VILLAGE CEMETERY

Following are two brief stories of two small cemeteries that are creditable to their communities. One is managed as a private corporation and the other as a city institution. Both are carefully managed and intelligently improved. The accompanying illustrations, taken in cemeteries of

Leicester and Melrose, Mass., present some concrete evidence of the fact that even a small country cemetery may be neatly kept and well managed.

A generation or two ago, many of these presented an unkempt and almost hideous aspect. While this applies in too many instances today, the march of improvement is making headway in no uncertain manner.

Credit for this is due in large measure to the intelligent care and self-sacrificing interest of trustees and managers, and especially to public-spirited and generous friends who have from time to time donated goodly sums of money for the embellishment and adornment of the cemetery.

Pine Grove Cemetery, Leicester, Mass., has been especially fortunate in this respect.

This cemetery was incorporated in 1841, and has always been very well cared for, more so than a majority of country burying grounds. The original purchase of about six acres was increased in 1873 by the addition of about thirteen acres.

In 1891-2 two wealthy and public-spirited residents, Mrs. John E. Russell and Mrs. Julia T. Murdock, caused to be erected and presented to the corporation, the present massive and ornamental entrance. This was constructed of granite from Redstone, N. H., and was flanked on either side on the line of the highway by a rough native stone wall.

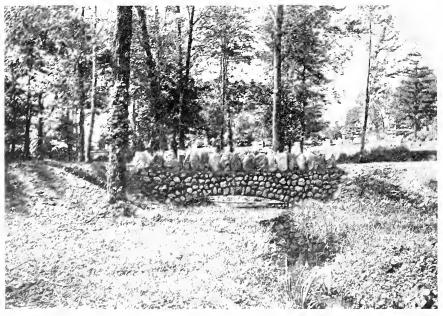
In 1906 Mrs. Russell offered to remove this wall and erect in its place one of granite of the same style and character as the entrance. This offer was accepted, the wall was built at a cost of about \$2,500 and with the entrance makes a very pleasing approach.

In 1888 a receiving tomb of red brick with brown stone trimmings was erected at a cost of about \$1,400. This was placed in a conspicuous and wind-swept situation, with nothing for a background to relieve its bare outline. In the autumn of 1909 Mrs. Russell again came forward with a proposition to remove the tomb to a more secluded and less exposed site. This offer was gladly accepted, and in the spring of 1910 the work of removal was done, with no injury to the building, or to the ampelopsis which adorned it. This work was done at a cost of nearly \$1,000.

The photograph with the overarching trees shows its present set-



RECEIVING TOMB THAT WAS MOVED FROM AN OPEN LAWN TO THIS SHELTERED SITE, PINE GROVE CEMETERY, LEICESTER, MASS.



NEW RUSTIC BRIDGE, WYOMING CEMETERY, MELROSE, MASS.

ting. A circular space of about onethird of an acre just within the entrance which is too wet for burial purposes had been allowed to take on an unkempt appearance. In 1907 Mrs. A. B. Davidson, one of the trustees, assumed the cost of putting this tract in good lawn condition. Since then this space has been further adorned by the planting of shrubbery and flowers.

Two smaller tracts which had become unattractive have been beautified by Mrs. Russell.

In 1904 the present superintendent, Charles F. Munroe, assumed charge of the cemetery. Under his painstaking care and devotion, many lots which had become dilapidated have been renewed, many stones which were leaning, now stand erect, and nearly all the monuments and headstones have been cleaned. Through his efforts several iron fences have been removed from the lots they surrounded, and it is hoped the few that remain will follow.

The "Perpetual Care" fund amounts to about \$14,000, and receives some additions each year.

The sum required for perpetual care is \$100 and \$150, according to the condition and demands of each individual lot.

Wyoming Cemetery, Melrose, Mass., is controlled by the city, and has been under the charge of Superintendent R. A. Leavitt since 1899. The grounds were opened in 1856, but there were no restrictions or modern features of management until Melrose became a city in 1899.

This year Mr. Leavitt built the substantial little rustic bridge shown here, and next spring expects to build a rest house, improve the sunken garden and extend the water system.

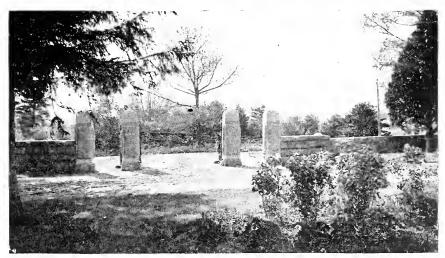
Wyoming contains sixty acres, of which thirty are improved. There have been eight thousand interments with a yearly average of about 160. The tract has a well balanced topography of level land, hills and ravines, well wooded with a native growth of buttonwood, pine, ash, spruce, maple, elm, oak, linden, etc. A small lake and two brooks add interesting water features to the landscape. The cemetery has been conducted on the lawn plan since 1899, and there is now a perpetual care fund of \$30,000, fifty per cent of the price of each lot being allotted to this fund. No mounds are allowed and the designs of monuments must be approved by the cemetery authorities.



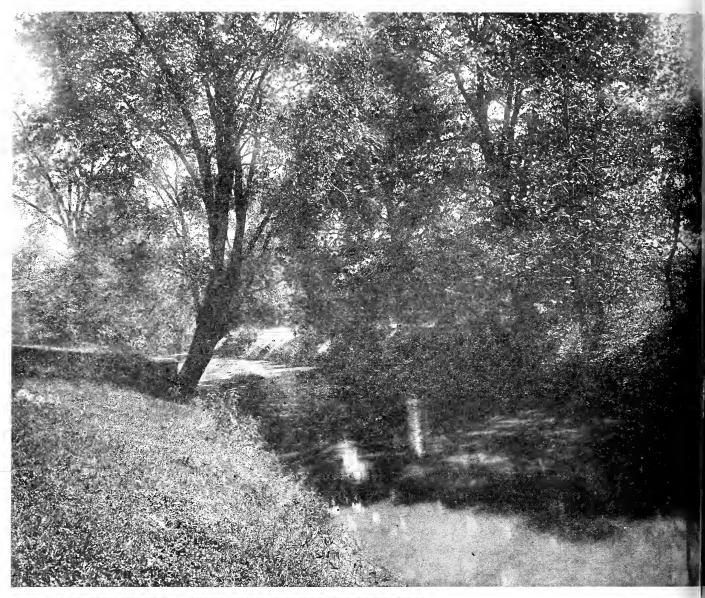
LAWN WITH PERPETUAL CARE AND NO MOUNDS, WYOMING CEMETERY, MELROSE, MASS.



THE LAKE AND THE LODGE, WYOMING CEMETERY, MELROSE, MASS.



THE ENTRANCE, PINE GROVE CEMETERY, LEICESTER, MASS.



VIEW ON THE RIVER ROUGE, GRAND LAWN CEMETERY, DETROIT, MICH.

Grand Lawn Cemetery, a new tract being developed on modern lines in Detroit, has just issued a handsomely illustrated portfolio of views, two of which are shown herewith. The tract has a frontage of over a mile on Grand River avenue, and is bounded also by the River Rouge from which it is separated by a fine natural growth of trees.

Its natural situation and topography are well suited to cemetery purposes. The ground, high and rolling, rising abruptly above the lakes and river, affords an unequaled opportunity for drainage and a foundation of light, dry soil so desirable for cemetery purposes. The lakes form a prominent feature in the frontage of the grounds, and add to their attractiveness as a natural park. The effort in developing the grounds has been to conserve all the natural beauties of

the tract and mould them into the general scheme of laying out and improving the ground. Grand Lawn lays claim to being the largest tract in Michigan used for cemetery purposes.

Perpetual care has been adopted throughout the grounds from the start and several fine views of section one illustrated in the book show the general appearance of the grounds under the perpetual care system. Perpetual care is included in the purchase price of every lot.

Special areas have been reserved for lot owners who do not care for monuments. One of the pictures in the book shows a beautiful bed of flowers, substituted for the monument. Low markers give the necessary data at each grave. For those who desire to follow this plan and make provision for all time, Grand Lawn re-

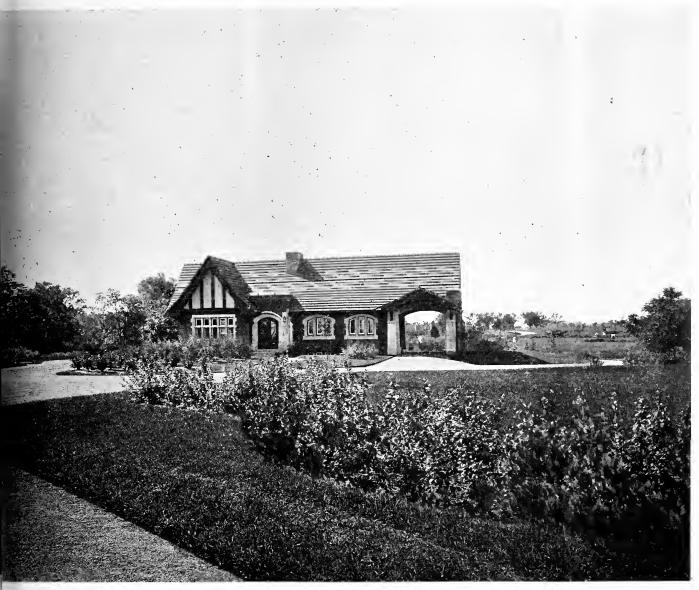
COMPLETE PERPET

ceives funds in trust to be applied as directed.

Special lots and groups of lots are reserved for those wising to purchase large areas for family burial grounds. By this method one monument is substituted for several, as in the case of numerous small lots and the adjoining lot-owners' friends or relatives.

Locations are also reserved for private vaults and mausoleums.

A first-class lawn in the best condition is guaranteed on every lot sold. All shrubbery in the grounds is developed and cultivated, and roadways, buildings, drains and water supply system maintained in good order. The large tracts reserved for park purposes also come under the perpetual care system.



THE LODGE AND APPROACH, GRAND LAWN CEMETERY, DETROIT, MICH.

E in NEW CEMETERY

All flower beds are planted by cemetery employes at the expense of the lot owners. Prices for planting and care for one year range from \$1.50 up, according to the size of the bed and the kinds of plants selected. Plants may be obtained at the cemetery if desired.

One of the pictures illustrated here shows a view of the gate lodge, seen from without the grounds. The lodge contains a commodious waiting room, which may be used for chapel services when desired. In addition the Lodge contains the administrative offices, with fireproof vaults and necessary toilet accommodations. The basement is fitted with ample receiving vaults and the entire structure heated by steam and lighted by electricity.

The impressive sweep of splendid lawn, the graceful roadways winding among the background of hills, trees and shrubs, produce a beautiful setting for this satisfying and appropriate structure.

The lay-out and planting of the entrance and its surroundings have been well planned for the convenience of traffic, the work of administration, and the production of a pleasing land-scape picture.

A large tract such as this is fortunate to have started with an adequate complete plan for its orderly development, and with perpetual care throughout.

The cemetery is northwest of the city on Grand River avenue and is reached in forty-five minutes by the Orchard Lake cars. City offices are maintained at 28 Home Pank Bldg. The officers of the company are:

President and treasurer, C. M. Burton; vice-president, James S. Holden; secretary, M. M. Wilmarth; superintendent, W. J. Stringer; engineer, E. B. Wilhelm.

The book from which we show the accompanying pictures, has many other fine illustrations and well-prepared descriptive matter written by E. B. Wilhelm.

The printing, typography and illustrations have been carefully executed to make one of the finest of the handsome cemetery books of views. The illustrations are all of the size of the two shown here and occupy every other page throughout the book, the opposite being given to brief descriptive matter appropriate to the illustration. The text is well-prepared and is given an unusual typographic form. The book is printed in a rich brown color.

CEMETERY NOTES

A movement is on foot to establish a new city cemetery for Chattanooga, Tenn. The site as advocated by the men who are behind the movement is the land lying just east of Missionary Ridge. There is at this point a large area that is well adapted to such use.

The court has been petitioned for a charter for Edgehill Cemetery, of Plymouth, Pa. The directors are William Templeton, James Templeton and L. Floyd Hess.

A tract of land on Adams and Green Bay road, about a mile north of the Milwaukee, Wis., city limits and just south of the new Evergreen park, has been purchased by a corporation for cemetery purposes. It will be improved on modern lines and is called Evergreen Cemetery.

According to Superintendent Hobert, of Lakewood Cemetery, Minneapolis, the ground selected by the Great Falls, Mont., Cemetery Association for its cemetery, when viewed as to drainage, nearness to city and its possibilities for development into an attractive burying ground, "appeal to me as being one of the most desirable sites it has ever been my privilege to inspect. In fact, it may be called an ideal location and when it has been developed and beautified, your people will then agree, I am sure, that this statement is not exaggerated."

The old cemetery at Dresser Hill, Charlton, Mass., has been cleaned up and monuments and slabs reset where necessary. At the last annual meeting the town made an appropriation for this work, and the old burial ground looks well after the overhauling.

The tax assessment case by the town of Milford, Mass., against the proprietors of Pine Grove Cemetery, has been referred to the full bench of the Supreme Court of the State by Chief Justice Arthur P. Rugg. The matter was brought before him in a petition for certiorari of the Inhabitants of the Town of Milford against the County Commissioners of Worcester County. The Justice held, among other things, that the matter was without the jurisdiction of the County Commissioners. This case has attracted much attention, it having been brought about by a tax assessment levied by the assessors of Milford on the personal property of the Pine Grove Cemetery proprietors.

A strong protest has been presented against the extension of the Bridge

street cemetery, Northampton, Mass., by the land purchased about a year ago at the corner of North and Orchard streets. People living in the vicinity of the plot declare it will greatly injure their property values.

Mr. Bert Carpenter, of Iron Mountain, Mich., an expert in dirt road making, highly recommends the splitlog drag, or devices constructed on similar principles, as the best repairing device in use at present.

All the bodies buried in Greenlawn Cemetery, Indianapolis, Ind., which has been in use over 50 years, have been removed to Crown Hill Cemetery in that city. This was the result of a Superior Court order on the court's quieting a title to the property asked by the heirs of Edwin J. Peck, who at one time was president of the Vandalia R. R. Co. The tract which became a cemetery in 1852, was purchased by Peck in 1850. He divided the land into 280 burial lots, half of which were sold. The contracts signed by the persons buying the lots provided that in case the ground should cease to be used as a cemetery the property should revert to the Peck heirs. Recently the city took the site over as a part of the park system and the suit by the heirs followed.

At a recent regular meeting of the Portage township board, at Houghton, Mich., Martin M. Foley was appointed sexton of the Forest Hill cemetery, to succeed the late C. Baudin. It was decided to proceed at once with the laying out of the new tract of twenty-three acres recently added to the cemetery, so as to get in shape for selling lots in the new portion this winter.

CEMETERY IMPROVEMENTS

A permanent masonry dock is to be constructed on Otsego Lake, Cooperstown, N. Y., at the Lakewood Cemetery landing, funds for which have been collected. The dock will be substantial enough to withstand the ice of winter and will be large enough for use of the public steamers.

Work is progressing on the new mausoleum at Oak Hill Cemetery, Evansville, Ind. The foundations are of concrete and the walls will be built of dark brown brick laid in brown mortar. The trimmings and columns will be of cream colored

glazed terra cotta, and the roof of green glazed Spanish tile. The doors are of bronze. The floor is of encaustic tile with marble wainscoting. In the rear provision is made for the reception of nine caskets. The total cost will be about \$3,000.

Mr. Don A. Sanford, of Washington, D. C., who owns a farm in Stafford, Va., has presented to New Hope church a cemetery which will adjoin the church. The trustees are Messrs. Wm. Deacon, Price Edwards and W. C. Peyton.

The Memorial Gates erected by Hannah Jameson Chapter, D. A. R., at Oakwood Cemetery, Parsons, Kas., were unveiled and presented to the city on November 19, with interesting and appropriate ceremonies.

The board of trustees of the Farmers' Cemetery, Shobonier, Ill., has decided to add another acre to its area.

The managers of the West Pittston, Pa., Cemetery Association have recently completed a deal for the purchase, from the Lehigh Valley Coal Co., of a plot of ground, of nearly two acres, to be added to the cemetery. It lies along the river bank, between the West Pittston cemetery and the Jewish cemetery, and is of the same width as the old cemetery, with similar soil.

Directors of the Swedish cemetery corporation, Worcester, Mass., have decided to expend \$2,050 for improvements about the cemetery grounds. The reports made by the directors were encouraging, and showed that the corporation is experiencing a progressive and prosperous period. The tomb has been increased in capacity from 50 to 100 bodies, and many improvements have been made.

An addition to Holy Sepulchre Cemetery, Allentown, Pa., was consecrated last month.

Greenville Cemetery, Rochdale, Mass., which is to receive attention in the way of improvement, is practically in three parts, two of which are fully occupied. It is the second oldest cemetery in the town of Leicester. The newer portion will be kept up from funds deposited for the purpose.

The campaign of the South Joplin, Mo., Booster Club to beautify Fairview Cemetery is about to bear fruit. The city council recently instructed the cemetery committee to investigate the advisability of cleaning the standing grass and weeds, and thus remove a danger of spreading fire.

The contract for a new entrance and fence for the City Cemetery, Centralia, Ill., was recently let by the

City Council. The fence will be of considered. Mount Auburn Cemetery, wrought iron some 1,000 feet long, and the contract was awarded to the Enterprise Foundry & Fence Co., of Indianapolis, Ind.

The addition to the City Cemetery of Muscatine, Ia., is to be laid out on the lawn plan, and is expected to make Greenwood Cemetery an attractive burial place. The new addition is about three and a half acres in ex-

At the annual meeting of Oakland Cemetery, Freeport, Ill., a cheerful report was made and steps inaugurated for the instalment of an efficient water system in 1912.

Barnes & Spaulding of Pittsfield. Mass., have prepared plans for the development of the new part of the City Cemetery of Hinsdale, Mass.

The officers of Cedar Grove Cemetery, New London, Conn., are experiencing the usual difficulties of collecting delinquent bills for the care of lots, and at the last meeting the subject was seriously discussed, and resolutions passed to collect for payment for such work in advance.

The cemetery commissioners of Hartford, Conn., have recommended to the City Council the purchase of a plot of land as an addition to Zion Hill Cemetery.

The Baraboo, Wis., Cemetery Association are preparing to secure plans for a "mortuary chapel," at a cost limit of \$6,000. The Women's Civic League of that city are quite interested in the matter.

The new service building in Mount Auburn Cemetery, Berwyn, Ill., a suburb of Chicago on the C., B. & Q. R. R., has been erected from designs by Mr. A. J. Buerger, Jr., architect. The structure proper is 30 by 40 feet; over the verandas it is 50 by 40 feet. It is built of dark brown rough faced pressed brick, with Bedford stone trimmings; the roof is of green glazed tile, with copper gutters and down spouts, and there is a dormer window on front and rear, having copper trimmings. The waiting room is 18 by 40 feet, with beamed ceiling; the oak trimming is finished in dark green. Wainscoting, window sills and floors are of mosaic tiling. The lavatories for women and the rest room are similarly finished, and have the latest sanitary equipment. The building is lighted by electricity and heated with a hot-water system, and a water system has been installed expressly for this structure. The waiting and rest rooms are adequately provided with mission furniture, the comfort of the patrons being carefully

of which Mr. George Schrade is superintendent, and for which plans were made by Mr. O. C. Simonds. was described in these columns a few years ago, not long after it was opened.

NEW CEMETERIES

The Congregation Agudas Achem, Newburgh, N. Y., dedicated a new cemetery last month; it lies adjacent to Woodlawn Cemetery. With the purchase of the new plot of land near Woodlawn Cemetery, the Congregation Agudas Achem will own two cemeteries. The other one is near Chrystal Lake. The new cemetery of the Agudas Achem is opposite the cemetery of the B'Nai Israel Congregation.

The new St. Vincent's Cemetery, at Plymouth, Pa., was consecrated last month by Rt. Rev. M. J. Hoban, bishop of the Scranton diocese, in the presence of a large gathering. Mine caves ruined the old cemetery, and the company, whose workings destroyed it, donated a new plot of ground and paid the expense of the removal of the bodies.

The Board of Public Works of Antigo, Wis., have recommended the fixing up of twenty acres of the eighty acres of land owned by the city just southeast of the city, for cemetery purposes. The land in question was purchased by the city in 1907 at the time the attention of the council was called to the crowded condition of the present site.

Early next spring the new Catholic burying ground, lying four miles south of the Hartman stock farm. and ten miles south of Columbus, O., will be thrown open. It will contain 250 acres and will be one of the largest cemeteries in the state. Its opening means that after this winter no more lots will be sold in Calvary, the Catholic cemetery which has been used for years.

News from New Castle, Pa., says a charter for the Mountville Cenietery has been granted. The cemetery is located in Perry township. The incorporators are: Elam Z. Thomas, Alexander I. Young, Erskine E. Aiken, R. Calvin Weller, and Charles C. Wilson. It is stated in the charter that the cemetery will not be run for profit.

A corporation has been organized to plat and develop a tract of land recently purchased on Adams and Green Bay road, north of the city liniits, Milwaukee, Wis. It is a choice location for a cemetery, and the

trustees claim to intend to make it one of the finest cemeteries in Wisconsin. It is named Evergreen Cemetery.

Graceland is the name of the new cemetery of 51 acres, which is to be opened next year by the cemetery commissioners of Racine, Wis., and which is to supplement Mound Cemetery, now nearly all sold out. Mound Cemetery, of 65 acres, was named from the many mounds found on the tract, of historic origin, some probably 1,000 years old. In 1852 sixty mounds were platted in its vicinity. most of them were investigated and contained skeletons. A vast amount of interest attaches to these mounds, and they make the cemetery a noted one; it is earnestly desired that they be preserved. Mr. Louis F. Mohr is superintendent of both Mound and the new Graceland Cemeteries.

THE COVER ILLUSTRATION

The illustration on the front cover shows one of the most elaborate cemetery entrance gateways in America. Its architecture, of the Italian Renaissance style, has been closely followed in the artistic Barre granite piers, and the elaborate iron work so beautifully wrought out in the ornamental gates and fence.

Some idea of the massive proportions may be obtained from a few of the dimensions given. The granite piers, or posts, are each 25 feet high, and six feet square at the base Each of these stately columns contain upwards of 50 tons of Barre granite. Two hundred and fifty cubic feet of concrete was used in the foundation of each of these posts. The ornamental iron gates are each 18 feet wide, 17 feet high at the hinge side, and 12 feet high in the center. The approximate weight of the iron in these magnificent gates was over ten tons, there being a total frontage at the main crtrance of about 114 feet.

The contract for building and erecting the ornamental gateways and fence was awarded to the Stewart Iron Works Company, of Cincinnati, whose reputation for exceptional work of this character insured that the work would be carried out in the spirit of the architect's design.

The Roseland Park Cemetery entrance was completed in 1909, at a cost of about \$25,000. That the necessary expenditure has more than warranted the directors in carrying out this elaborate idea is proven by the fact that these attractive grounds are one of the show places of visitors to Detroit.

TOPICAL INDEX to OUTDOOR LITERATURE

An Index to articles on Gardening, Forestry, Park, Cemetery and Civic Improvement and kindred subjects in leading general and special magazines

Subscriptions will be received for any magazine or periodical at club rates with Park and Cemetery. Publications in which articles appear are listed below, and referred to by abbreviations, thus: S. L. 8:678, Feb. 09, means: Suburban Life, vol. 8, pages 678, February, 1909, Single copies should be ordered direct from the publications at addresses given below.

PUBLICATIONS INDEXED AND ABBREVIATIONS USED.

American Botanist, Joliet, Ill. (A. B.), 75c year; 20c copy.
American City, The, (Am. C.), New York, \$1.00 year; 10c copy.
American Florist, Chicago (A. F.), \$1.00 year; 5c copy.
American Homes and Gardens, New York (A. H. G.), \$3.00 year; 25c copy.
Architectural Record, New York (Arch. Rec.), \$3.00 year; 25c copy.
Art and Progress (A. & P.), Washington, D. C.; \$1.50 yr.; single copy 15c.
Beautiful Homes (B. H.), St. Louls, \$1.00 year; 10c copy.
Canadlan Florist, The, Peterboro, Ont., Can. (C. F.), \$1.00 year; 10c copy.
Canadlan Municipal Journal, Montreal (C. M. J.), \$1.00 year; 10c copy.
Conservation, Washington, D. C. (Cons.).
\$1.00 year; 10c copy.
Country Life In America, New York City (C. L. A.), \$3.00 year; single copy.

City (C. L. A.), \$5.00 year, Single 25c.
Country Gentleman, Philadelphia, (C. G.), \$1.50 year; 20c copy.
Century Magazine, New York City (Cent.), \$3.00 year; 35c copy.
Chautauquan, The, Chautauqua, N. Y. (Chaut.), \$2.00 year; 25c copy.
Craftsman, The, New York City (Cr.), \$3.00 year; 25c copy.
Embalmers' Monthly, Chicago (E. M.), \$1.00 year; 10c copy.
Fern Bulletin, Joliet, Ill. (F. B.), 75c year; 20c copy.

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Fruit Grower (F. G.), St. Joseph, Mo., \$1.00 a year; 10c copy.
Gardener's Chronicle of America, Jersey City, N. J. (G. C. A.), \$1.00 year; single copy. 10c.

City, N. J

Garden Magazine, Garden City, N. Y. (G. M.), \$1.00 year; single copy, 15c. Gardening, Chlcago (Gard.), \$2.90 year, single copy, 10c. Gartenkunst, dle, Frankfurt, Germany (German), G. K., \$4.00 year; 50c copy. Good Roads Magazine, New York (G. R. M.), \$1.00 year; single copv. 10c. Horticulture, Boston (Hort.), \$1.00 year; single copy. 5c.

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Monumental News, Chlcago (M. N.), \$1.00 year; single copy, 10c.
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50c year; single copy, 10c.

Civic Improvements, Home Grounds

Beaumont, Texas, Improvement of, by George A. Smith. Illust. A. C. 5:254-8. November, 1911.

Civic Improvement as Applied to Street Lighting, by L. L. Hopkins. Illust. A. C. 5:282-5. November, 1911.

Civic and Commercial Organizations, their Relations to Municipal Government, by Mayo Fesler. A. C. 5:274-9. November, 1911.

Constitution for a Village Improvement Society. A. C. 5:299. November. 1911.

Festa in America, by M. M. Needham. Illust. Outlook, New York, 99:523-31. October 28, 1911.

Schenectady's Scope of Vision, by Walter H. Reed. Illust. A. C. 5:270-5.November, 1911.

Gardens and Landscape Gardening.

Benrath Castle and its Gardens, by Gustav Ammann. Illust. G. K. (German), 13:197-202. November, 1911.

Flowers and Color, Garden Full of: Miss Kneeland's Garden at Lenox, by Thomas MacAdam, Illust. C. L. A. 20:23-5. October, 1911.

Hedges in the Landscape Picture, by Harry Mass. Illust. G. K. (German), 13:205-9. November, 1911.

Making One Acre Look Like Ten, by Wilhelm Miller. Illust. G. M. 14:206-8. December, 1911.

Mexican House and Garden in California, by E. E. Sayford. Illust. C. L. A. 21:37-9. November 1, 1911. November in the Garden. Illust. A. H. G. 8:416-7. November, 1911. Vines, Taking Care of in Winter, by W. C. McCollom. Illust. G. M. 14:208-10. December, 1911.

Parks, Cemeteries and Public Grounds

Civic Improvement in Parks and Parkways, by D. C. Armstrong. Illust. M. H. 39:454-7. December, 1911.

Greenhouse, Small, Building a, by P. S. Sweetser. Illust. A. H. G. 8:406-8. November, 1911.

Playground Creed of the Playground League of New York. A. C. 5:269. November, 1911.

Playgrounds, Moving Pictures in, by E. M. Best. Survey 27:1060-1. October 21, 1911.

Schiller Park, the New, in Berlin,

by A. Weiss. M. D. G. (German) 26:541-4. November 18, 1911.

Trees, Shrubs and Plants

California, Silva of, by W. L. Jepson. Illust. Nature, New York, 87: 452-3. October 5, 1911.

Chrysanthemum Society of America, Annual Meeting of. Illust. F. E. 32:933. November 11, 1911.

Green, Prof. Samuel B., by Harry Snyder, M. H. 39:461-70. December,

Hickory Bark Borer, by H. W. Merkel. Illust. C. L. A. 20:35-6. October 15, 1911.

Insect Parasitism and Its Peculiarities, by W. M. Wheeler, Popular Science Monthly, New York, 79:431-49. November, 1911.

Lombardy Poplar as Decoration, by Samuel Howe. Illust. International Studio, New York, 44:sup.63-8. October, 1911.

Moving Big Trees in Winter, by W. C. McCollom. Illust. G. M. 14:217-19. December, 1911.

Retarding of Plants and Flowers, by L. C. Corbett. A. F. 37:845-6. November 11, 1911.

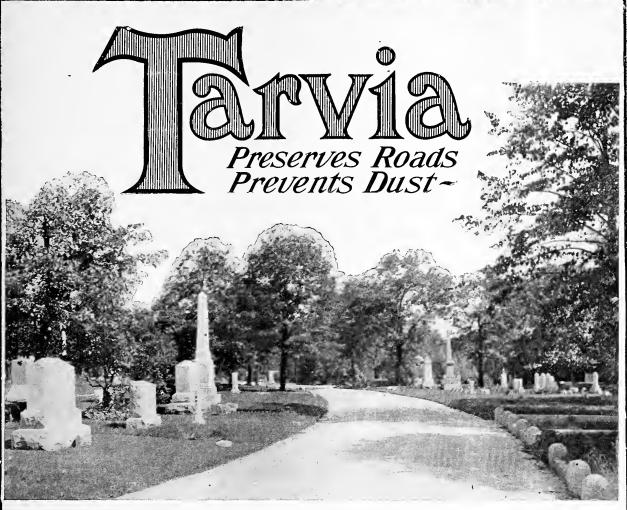
Trees and Shrubs in Modern Garden Art, by J. F. Mueller. M. D. G. (German), 26:544-8. November 18, 1911.

REPORTS, ETC., RECEIVED

The City Plan Commission of Jersey City, N. J., is issuing an interesting series of Brochures on the Work of City Planning in General and the work of the commission in particular. The literature is issued under the general title: "Know City Planning-Yesterday, To-Day, To-Morrow." The first of the series contains a reprint of a series of educational articles on city planning that were published in the Jersey Journal and Hudson Observer. The second of the booklets is Serial Pamphlet A., describing the organization, personnel, aims and methods of work of the commission. Walter G. Muirheid is secretary of the commission.

OBITUARY

After an illness of only two days William Crosbie, Superintendent of Washington Cemetery, Washington, Pa., peacefully passed away, November 25, and was buried on the 28th. A host of relatives, friends and townspeople attended his funeral, and among the outsiders were every Pittsburgh member of the Association of American Cemetery Superintendents, namely, W. B. Jones, superintendent Highwood; E. S. Youden, superintendent Uniondale; Wm.



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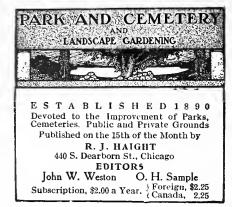
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Harris, superintendent Woodlawn; Wm. Allen, superintendent Homewood, and William Falconer, superintendent Allegheny. Among the many floral tributes sent to his home in loving memory was a rich and beautiful wreath from the Association of American Cemetery Superintendents, of which body the deceased was



THE LATE WILLIAM CROSBIE.

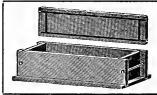
a devoted and respected member. It was set in an easel and prominently placed at the foot of the casket, and it was sincerely appreciated by the family. William Crosbie was born in Scotland in July, 1832; hence was in his 80th year. In his earlier life he was schooled in gardening and forestry. In 1853 he came to America and for the first 15 years was employed in nursery, forestry and horticultural work, then on April 1, 1868, he accepted the superintendency of the Washington Cemetery, a position he held during the rest of his lifeover 43 years. Good and faithful servant! A widow and seven children survive him. One of his sons, John M., has been assistant superintendent under his father for some years, and

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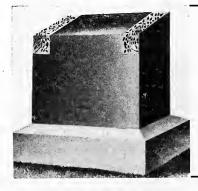
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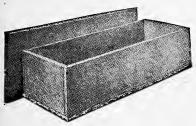
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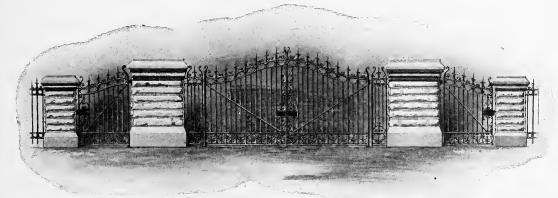
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another son, David T. M., is also employed in the cemetery. Of the other children two sons are United Presbyterian ministers, and a daughter is the wife of a minister. "An honest man's the noblest work of God." And on this pedestal, his whole life long, William Crosbie stood. He was a Christian gentleman, a member and staunch supporter and for many years an elder of the United Presbyterian Church of the city of his residence. Than his, the probity of no man in the community stood higher. His Board of Management loved him as well as trusted him, and when speaking with me the day of the funeral, they expressed themselves more as if they had parted with a brother than with an employe. All Washington deplored his loss. He was a sturdy, worthy, sterling son of a rugged land, a noble credit to his native country, and a desirable and appreciated citizen of the home of his adoption. As a man shall love his mother and cleave unto his wife, he was Scotch to the core, and American in heart, soul, interest and sympathy. And as Saul in stature towered over the Children of Israel, so does the Crosbie family rise among its fellowmen, 6 ft. to 6 ft. 6! Far seeing in business matters he had obtained a competency. Progressive in professional ways, more especially in his septuagenarian years he stood forth for every advanced idea in modern cemetery work, and with the courage of his convictions, he moulded the minds of the lot owners into his own conception. He was a regu-Tar and interested attendant at the annual conventions of the Cemetery Superintendents, and always ready in their discussions. But who would have thought that that black-haired, tall, erect, brawny Scot was in his 80th year; he worked more like a man of 60. He had trees in his heart and an arboretum in his cemetery. He practiced what he preached. Time and time again he urged his State and the National Government in the interest of trees and forestry, and so practically and sensibly was this done, that his counsel was heeded and sought for, utilized and absorbed. Sadly we shall miss our genial friend. W. F.

William H. Moon, the well-known nurseryman of Morrisville, Pa., died Nov. 18, in Trenton, N. J. He was stricken just as he stepped from the trolley car on which he had come from Morrisville, and was assisted to the office of his family physician, Dr. Court, only a short distance away,

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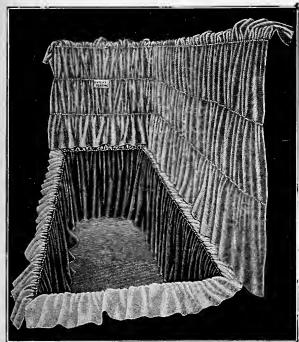
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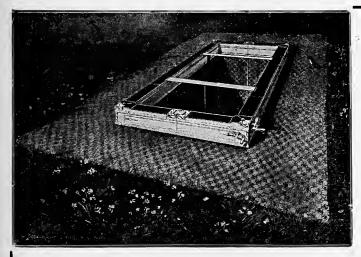
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where he died of apoplexy soon after. Mr. Moon was born in Morrisville, March 6, 1849. He was the son of Mahlon Moon, one of the pioneer nurserymen of this country, who started in business in 1849, and whom the late Samuel C. Moon, brother of Wm. H. Moon, succeeded in business; S. C. Moon died only ten months ago. W. H. Moon started for himself in 1872, establishing the William H. Moon Nursery Co., which was incorporated in 1890, and of which he was the treasurer and general manager. In these thirty-nine years, under his able management, the nursery increased from twenty acres to nearly five hundred, on which are grown 2,000 varieties of trees and plants. It was always Mr. Moon's aim to grow good trees to sell at a good price rather than stock to sell without any item of profit, and his business, thus started, has increased until today the nursery covers nearly 500 acres of land and employs as high as 200 men at certain seasons of the year. Mr. Moon also made a specialty of ornamental trees and was one of the pioneers in the production of evergreens of the better class, and probably one of the first nurserymen to advocate the advantages and practising the custom of shipping evergreens with balls of earth about their roots, and at the time of his death was one of the largest growers of evergreens in this country. He was active in public works and affairs both in his home district and in trade organizations in general, being a member of the National Nurserymen's Association and Ornamental Grower's Association and various other trade organizations.

PUBLISHER'S NOTES

The Winter Courses of the School of Agriculture of the Pennsylvania State College of twelve weeks begin December 6th, 1911, and close March 1st, 1912. Students may specialize in General Agriculture, Horticulture, Dairy Husbandry, Dairy Manufacture and Poultry Husbandry. Farmers' Week begins on Wednesday, December 27th, 1911, and closes on Wednesday, January 3d, 1912: a series of lectures and practical exercises which are open to any citizen

cises which are open to any citizen of the state. Information may be obtained by addressing Alva Agee, Department of Agricultural Extension, State College, Pa.

The periodical formerly known as "The Journal of West Park, No. 2," Chicago, is now "The Journal of Social and Civic Chicago." Its matter is largely associated with the small is largely associated with the small parks and playgrounds questions, and all that that pertinent subject com-prises. It is published monthly in the interest of Humanity by the



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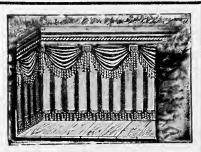


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ASKED AND ANSWERED.

Concluded from page 728.

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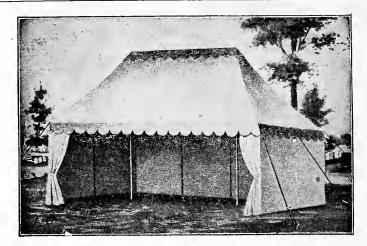
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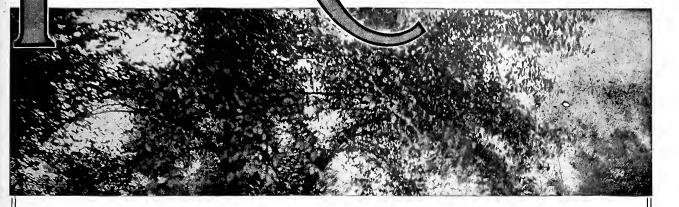
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Vol. XXI., No. 11

JANUARY, 1912





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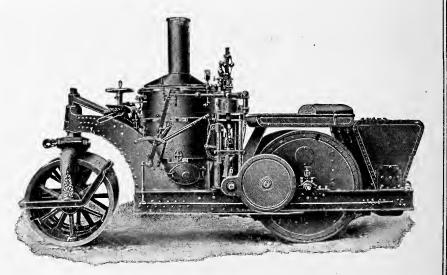
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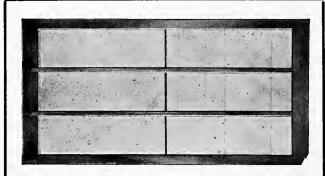
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PARK AND CEMETERY

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Vol. XXI

Chicago, January, 1912

No. 11

Shall We Have a Bureau of National Parks?

At the recent convention of the American Civic Association at Washington, D. C., the Secretary of the Interior said that the national parks, like Topsy, have "just growed." "There is now no consistent legislation concerning the parks, in fact there is a wide divergence in the statutes under which they are administrated." President Taft said "we cannot carry them on effectively unless we have a bureau which is itself distinctively charged with the responsibility of their management and for their building up."

There can be no question about the advisability of such a bureau, but as a matter of course its usefulness would depend chiefly upon the sort of men chosen to do the work and the power placed in their hands. It is perhaps not the compiling of statistics, the distribution of literature or illustrations, or the influencing of public sentiment, much as such things may help the good cause, that is needed, but practical field work. As President Taft says: we need uniformly good roads taken care of on some general plan and not subject to the whims of a local superintendent, or concessionaries, whose chief object is to induce visitors to patronize his hotel or touring outfits. It is probable that much of the actual field work can be best done by the engineers of the War Department, and at least the co-operation of this branch, of the Government would seem to be very important. The one thing to avoid is a bureau established to make a place for a head and a number of clerks, whose chief qualifications are political influence. Such a bureau would probably only make matters still more complicated with a lot of red tape, of little or no practical advantage over the present system. What is needed is a bureau headed by a practical, paid man, with the necessary assistants, who will not occupy valuable space in some public building in Washington, but who will spend their time in the actual field of work.

Science and Horticultural Progress

Prof. C. S. Sargent recently expressed regret at the lack of popular interest in our scientific horticultural institutions. He called attention to the paltry attendance of visitors at these institutions, and the lack of cooperation by commercial nurserymen in their work. It seems a strange commentary on our lives and aims that the complaint is applicable to our nation as a people. We are appreciative of any new discovery in the electric world, or of inventions promising facility or economy in the transaction of business. Is it that the calibre of the individuals who discover means of advancement in industrial life is superior to that upon which we are dependent in the horticultural world? Whence comes the lack of forethought, ingenuity or sheer successful force so evident in manufacturing and so deplorably absent in horticultural pursuits? Prof. Sargent cites a case where he sent a collection of new plant introductions to a nurseryman with the understanding that they would be increased and made horticulturally available, and later found that the whole consignment had been sold. We know of park officials who are actually buying these newer sorts of plants, propagating them and planting them out in public grounds for popular edification, but even so the fact remains that our nurserymen do not sufficiently cater to the better element of our peoplethe real plant lovers-and why not? Surely it does not involve commercial failure, as witness some of the old world

houses who have made that a tenet of their business for generations. Vilmorin and Andrieuse of Paris, Veitch of Chelsea, Haage and Schmidt of Erfurt, Sparth of Rixdorf, Pynard Van Gaert of Belgium and others have succeeded commercially quite as much as in evolving new means of presenting materials-sometimes new material, sometimes highly improved forms of the old. As our citizenship becomes more affluent and cultured, there will be an extending demand for the wealth of the world's vegetation, and some of our progressive, intelligent and substantial nurserymen will find a field for secure, permanent and profitable development in supplying the demands. We shall watch with interest the progress of any who attempt it, and it will be of interest to know what at least one of our commercial houses has seen fit to send a collection to China in conformity with this general policy.

The Lincoln Memorial, Washington, D. C.

We very much regret to notice that certain interests have arrayed themselves against the Park Commission's scheme of site and memorial for our immortal Lincoln, and are urging the building of a road from Washington to Mount Vernon. It was hardly to be expected that any national memorial backed with so large an appropriation by Congress would escape without some efforts from some sources to divert the intention into interested channels, and therefore, the efforts of the American Institute of Architects to prevent such diversion should be warmly and effectively endorsed. Both the character of the memorial and the site were recommended in the report of the Washington Park Commission in 1902, and when Congress proposed to enact a law for the erection of a memorial to Lincoln in 1909, President Roosevelt asked for a report from the Fine Arts Commission, appointed in January 1909, upon the various sites suggested. This Commission after very careful consideration recommended the site, proposed by the Park Commission in 1902, as being the "most commanding situation it is possible to imagine." Although the decision finally rests with Congress the people should not allow any tampering with the recommendation of the greatest authorities of the country on the subject that could be brought together to determine the question such as the men who made the above recommendations. The idea of a road costing between 30 and 40 millions of dollars taking the place of a great public art memorial, to honor the great name, and embellish the beautiful city, savors too much of automobiles and Real Estate. Every reader should at once communicate with his representatives in Congress, and demand a vote from the lines of the Commissions' reports.

The Annual Cement Shows

There will be three Cement Shows the coming year. The second annual in New York City, January 29-February 3; the fifth annual in Chicago, February 21-28, and the first annual in Kansas City, Mo., March 14-21. These cement exhibitions are being recognized as fixed institutions and are conducted under the management of the Cement Products' Exhibition Co. The increasing use of cement not only for large constructive purposes, but in so many directions of every-day utility, and for such varied productions, coupled with judicious advertising, has attracted the attention not only of builders and building material dealers throughout the country, but has made these exhibitions quite popular with the general public.

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PARK BUILDING UNDER WAY IN BROOKLYN

The "budget exhibit" of Greater New York, an illustrated exposition of how the city spends its money, gave some valuable information about the Brooklyn park system.

Some of the interesting pictures showing recent improvements in the Brooklyn parks are reproduced here. The photographs presented a graphic story of the policy of Park Commissioner Michael J. Kennedy of Brooklyn in administering the work of his department. Briefly, this policy is this:

Improve-not acquire.

Commissioner Kennedy doesn't hold to the idea that more land should be obtained by the Park Department. Instead, he says, let there be vast improvement on the land already within the department's control.

To this end millions of dollars are being expended on park building. When some of the improvements contemplated have been completed, the borough's residents will be in a position to point with pride to parks and parkways as fine as those to be found anywhere.

Including Prospect Park, the bridge approaches and the various playgrounds, Commissioner Kennedy has some 1,134 acres of park land to care for. He has jurisdiction, also, over many miles of parkways and streets. To handle all this territory is a pretty big job, the commissioner finds. It's a task with many loose ends to pick up, and Mr. Kennedy is kept so busy at it that he is not anxious to acquire any more parkland and parkways or streets. Instead, all the money he can abstract from Pa Knickerbocker's pockets he is putting into circulation by buying steel and concrete for bridges, or paying laborers wages for planting new trees, or by laying out gardens, or putting up stout buildings where the public may learn all the wonderful things about parks.

Out on the Bay Ridge Parkway the commissioner is building a road bridge carrying the parkway under First Ave. It is of granite, with concrete interior. It is nearing completion and will be the finest structure of its kind in Brooklyn surpassing in every detail anything to be found along the Riverside Drive in Manhattan. The work of building it

was started in May. 1910, and the cost is about \$90,000. The presence of the Pennsylvania freight station and yards between the parkway and the water front made the improvement necessary. Along with the work of building this viaduct, regrading, plotting, seeding, re-



EUROPEAN LINDEN IN PROSPECT

soiling, and other improvements are being made, so that a garden spot will soon be in view to passengers on boats in the bay.

In conjunction with this improvement is another and greater one—the improvement of the Shore Road. The foundations for a massive sea wall have been built, and during the fall the work of erecting the wall was begun. This will take 250 working days—nearly a year's time—for land must be filled in between the foundations, which are some distance off shore, and the present shore line. The contract for this initial work calls for the expenditure of \$275,000.

The whole Shore Road improvement is going to cost the city about \$1,800,000. It will be at least 1916 before the plans can be carried out. The result

will be one of the most beautiful shore drives in the world. There will be one road uniformly fifty feet in width, with another, eight or nine feet wide, nearer the waterline, with parking space between the driveways. The wall will extend from Bay Ridge avenue to Ninety-second street, a distance of some 7,900 or 8,000 feet. The Shore Road Commission originated the scheme before consolidation and the designer was the late Frederick Law Olmsted, who also designed Central and Prospect parks.

Commissioner Kennedy is proud of his big trees. Among them are 100 European lindens. These were imported and set out about forty years ago. They are fine and well-grown, have a wide spread, and the highest ones are sixty or seventy feet. Seventy-five horsechestnut trees were planted about the same time. J. J. Levinson, the department arboriculturist, has charge of these trees. The lindens require little attention, but the horsechestnuts are subject to insects-and the biggest are two-legged human ones who wreak damage each year in their eager search for chestnuts.

The little things count in making up the architectural beauty of the parks, and Commissioner Kennedy takes no little pride in the flights of granite steps near the Fiftieth street entrance to Prospect park. They are thirty feet broad and are the only steps of their type anywhere in Brooklyn parks. It cost \$10,000 to build them.

William J. Zartmann, superintendent of Parks, has the general supervision of all these improvements, and he has on his list for 1912 a number of others. The girls' playground in McCarren Park, to cost \$50,000, will be completed next year; the boys' section, costing \$100,000, will be ready for use this fall. Fort Greene Park has been scarcely touched in fifty years and Superintendent Zartmann has plans in mind for improving this park shortly at a cost of \$45,000. The park will be entirely remodeled, new drainage and irrigation systems will be installed and portions of it will be restricted at night so that small people cannot destroy valuable foliage. Then,



BRIDGE CONSTRUCTION ON BAY RIDGE PARKWAY, BROOKLYN.

also, the Red Hook, Bushwick and Mc-Kibbin street playgrounds are nearing completion and also another playfield of fourteen acres will soon be finished. The playground is located in McCarren Park, taking up more than one-third of the park. At Highland Park some \$45,000 worth of improvements are in progress; in Sunset Park improvements are to be made in 1912 costing \$40,000, storehouses and workshops in Prospect Park are to be built, to cost \$75,000, and Ocean Parkway, between Neptune avenue and Coney Island avenue, is to be regraded, 1,300 feet of parkway, at a cost of \$20,000, so that high tides won't flood the thoroughfares any more.

Other big improvements to be made are those affecting the Brooklyn Botanic Garden, formerly known as Institute Park. Commissioner Kennedy has placed this important work in the hands of Dr. C. Stuart Gager of the Brooklyn Institute of Arts and Sciences.

Dr. Gager plans to place about fortythree acres under cultivation. The improvements will include the erection of buildings and greenhouses.

One feature of this work will be the collection of Fruticetum or shrubs.

Some 150 or 200 varieties of wild shrubs growing within 100 miles of

eollection, and the eost will exceed \$1,000. The shrubs will be labeled for the benefit of visitors.

Another feature of the Institute work will be the laying out of an artificial bog, which has already been started. Insect-eating plants, cranberry vines and other bog specimens of growth will be planted. The cost of this will be about \$1,600. Forty beds of native wild flowers will be arranged, also.

The greenhouses will consist of a central palm house, with two north and two south wings. The buildings will be stocked with exotic plants, with a mushroom exhibit in the basement. In the northeast wing there will be experimental laboratories. The cost of these greenhouses will be \$125,000. Bids are to be advertised soon and the buildings will be ready for use in about a year.



NEW SHELTER HOUSE AT TENNIS GROUNDS IN PROSPECT PARK

Brooklyn, will be grown. It will take two or three years time to make this

North of the greenhouses will be laboratory and administration buildings of the Botanic Garden—to contain classrooms, offices, a library and other departments. In the basement will be an auditorium seating 450 people, and there will be basement workshops, also. The style of architecture will be Italian.

The illustrations shown here give a glimpse of some of the interesting improvements accomplished and of some of the work under way. An immense amount of grading must be accomplished to make room for the plantings and roads and drives that are to be built. Men and teams were busy all last fall on grading and dirt moving operations that will be continued on an extensive scale as soon as the spring weather permits.



MAKING IMPROVEMENTS FOR NEW GARDENS IN REAR OF MUSEUM.

ARE NATIONAL PARKS WORTH WHILE?

Address of President J. Horace McFarland at Seventh Annual Convention of the American Civic Association, Washington, D. C., December 13, 1911

There can only be a negative reply to the query of the subject, unless it be conclusively shown that the National Parks add definitely something of value to the life or the resources of the nation. Mere pride of possession cannot justify, in democratic America, the removal from development of upwards of five millions of acres of the public domain.

To establish true value, real worthwhileness, therefore, it is necessary to put the national parks on trial. Indeed, as the national parks are but a larger development of municipal, county and state parks, we may quite properly put on the stand the whole American park idea.

It is necessary to call the recent rapid development of a certain kind of parks in the United States an American idea, for it has no close parallel abroad. Examining, for instance, the admirable plan upon which the capital of Belgium has been developing since 1572, we note in Brussels an almost entire absence of such parks as those of Boston. The present day plan of Paris shows that inside the old city there had been provided almost as large an area of cemeteries in which to store the dead, as of parks in which to restore the energies of the living. Great London has barely an acre of parks for each thousand of her people-only a tenth of the ideal American provision of an acre for every hundred inhabitants. Even model Berlin is long on municipal forests and short on well-distributed municipal parks. The recently published Encyclopedia Brittanica, written abroad, devotes just 31 lines to the discussion of the word "park," but 17 of these lines refer to its military significance.

So the American service park is a new world idea, and it is even quite new in the new world; for at the date of the Centennial Exhibition in Philadelphia, parks in the United States were few in number, small in extent, and largely upon European models. Within five years, indeed, a contest has raged in Greater New York around the idea of diverting a portion of Central Park from the service of the relatively few in the way of purely pleasure development to the service of the very many through the establishment of well-equipped playgrounds.

Yet inquiry has developed that in 1909 74 American cities owned 41,576 acres of parks, an average of about four-tenth of an acre to the 100 of their population, and spent upon them that

year for maintenance—that is to make them of service to the people—an average of \$91.42 per acre. Some of these cities are in what I call the honor class of American communities, in that they own and maintain an acre or more of parks for each hundred of their people. Such cities are Council Bluffs, Minneapolis, Harrisburg, Colorado Springs and Springfield, Ill.

This American service park idea, into which we are inquiring critically as to its true value, its relative efficiency, has its intensive development in modern playgrounds-those first aids to endangered American childhood, of which few examples are found abroad, and not nearly enough in our own country. We have multiplied schools in which to cultivate the brain, but have delayed long in providing adequate facilities to develop and keep in order the body which houses the brain. Our cemeteries, our juvenile courts and our reform schools have increased much more rapidly than the means by which the city can hold back the population of the one and decrease the business of the others.

Chicago, for instance, has notably discovered the truth as to this relation between crime and disorder and the small park and social center. It is a departing relation; for in 1909 it was discovered that within a half-mile radius of her twelve splendidly equipped and maintained breathing spots, veritable life-saving stations in the midst of the sea of industrial strain and stress, juvenile delinquency had decreased 44 per cent, while in the same year it had increased 44 per cent as a whole.

Here then, is the first evidence for the defendant at the bar—the American Park idea. The service park, the ordered and supervised playground, act immediately and favorably on the health and the orderliness of the community, and consequently increase materially the average of individual efficiency. In other words, they pay dividends in humanity.

The park idea we are examining has a development in another way. The joining of separated parks by a highway of green, usually called a parkway, is the step taken when a community develops from the simple having of parks to the proud possession of a park system. The one may have merely happened; the other is always the result of a careful plan. Minneapolis, Hartford, Kansas City, Boston, Buffalo and other prosperous and advanced American cities

have such systems. Chicago has a great plan for a park system, and owns some links in the chain which is to bind it together.

An adequate park system, looking toward the future of the city, and giving to every inhabitant easy access without expense for transportation to the relief of a spot of green, to the recreation of a playground, is the most profitable investment a city can make. It is profitable in promoting the welfare of the people; it is profitable in providing along its borders increased taxable values. For instance, Kansas City's Paseo, cut through her length, has cleared fully its cost in increased values, and even old Central Park in New York has returned to the city more than eight times the total amount spent in purchase and development within sixty years.

I bring then before the court the second witness for the character and worth-whileness of the American park idea. Well considered park improvements always react favorably upon community values. Proper park investments are usually placed at what amounts to compound increment.

But there is another witness for the defendant. It is typified in the American flag, the emblem of our national existence, the concrete, visible essence of that love of country which manifests itself in the essential virtue of patriotism. Consider what it is that inspires us as we sing the national hymn. Is it our wonder of mining, showing in the hideous ore dumps, the sordid mining village? Is it in the burned-over waste that has followed the cutting of much of our forest wealth. Is it the powerhouse in which is harnessed the beauty of Niagara? Is it the smoking factory chimneys, the houses of the grimy mill town, the malodorous wharves along our navigable rivers? Is it even the lofty Metropolitan skyscraper, or the great transcontinental steel highway?

No; not one of these produces patriotism. Listen to the most sordid materialist who is American in birth or residence, as he boasts; it is always of the beauty of his town, his state, his country! Our devotion to the flag begins in that love of country which its beauty has begotten; it may end, at the last supreme test, in the beauty of soul that makes the patriot ready to die for his country in battle—if just battle there may ever again be.

Now these parks that have been pre-

sented to you, and those I am yet to present, are all of them planned to show forth the beauty of the land. Never a service have I seen or heard of that failed to use to the utmost the trees and the plants, the grass and the flowers that stand for our native land. Playgrounds are sometimes, perforce, on limited city spaces, but always there is at least the attempt to get the blue of the sky opened to the boys and girls. Into the brick and concrete heart of the city the park brings a little of the primeval outdoors, and here grows best the love of country which sees with adoration the waving stars and stripes.

So I hold that in safeguarding and stimulating the essential virtue of patriotism the beauty of the American park stands forth as most of all worth while. I urge that as an antidote to the teachings of social disorder, as a counter-irritant to the saloon, as a relentless foe to the slum, the American park idea in the playground is most completely justified.

It is but a step across the country and the state park to the national park. There come, increasingly in these workfilled American days, times when the tired spirit seeks a wider space for change and rest than any city, or indeed, any state can provide. The deep forest of the Sierras call, the snow-capped peaks of the Rockies beckon. The roar of Niagara can drown the buzz of the ticker. Old Faithful's gleaming column of spray shuts off the balance sheet. El Capitan makes puny the capital of any state, or of the nation. The camp under the oaks of the Hetch-Hetchy Valley, near the ripple of the Tuolumne. restores vigor, uplifts the wearied spirit. What cathedral of man's building shows forth the power of God unto health of soul as does the Grand Canyon of the Color-The Glacier wonderland of the Northwest gives us lessons on the building of the continent, and the giant sequoias of the Pacific Slope teach us of our own littleness.

These national parks, then, are our larger playgrounds. Everything that the limited scope of the city park can do as quick aid to the citizen, they are ready to do more thoroughly, on a greater scale.

To the vast open spaces, the sight of great mountains, the opportunity to live a mile or more higher up they add possibilities of real life in the open just touched upon as yet, even though more than three thousand horses this year drew their owners on camping trips into the Yellowstone alone.

The national playgrounds, too, can, if

they are held inviolable, preserve for us, as no minor possessions can, our unique scenic wonders, our great natural mysteries. The spouting geyser basins and marvelous hot springs of the Yosemite, the ancient homes of the cliff-dwellers of the Mesa Verde, the ice marvels of the Montana glaciers, the towering temples amid the big trees of the Sierras-how long would they last unharmed and free to all the people if the hand of the federal government was withdrawn from them? Ask harassed, harnessed Niagara-dependent right now for its scenic life upon the will of this Congress—after, indeed, Congress alone has saved it until now from state neg-

The nation now has, it should be said, vast and admirably handled national forests, potential with profit for all the people. But there must be no confusion between the differing functions of the forests and the parks.

The primary function of the national parks is to maintain in healthful efficiency the lives of the people who must use that lumber. The forests are the nation's reserve wood-lots. The parks are the nation's reserve for the maintenance of individual patriotism and federal solidarity. The true ideal of their maintenance does not run parallel to the making of the most timber, or the most pasturage, or the most water power.

Our national parks are young. They are vet undeveloped to any considerable extent. Their value to the nation is potential more than instant, simply because they are not, as a whole, yet known to our people. The nearest east of them is fifteen hundred miles west of the country's center of population in Indiana. Our people yet cross three thousand miles of salt water to see less impressive seenery, less striking wonders, less inspiring majesty in canyon, waterfall and geyser, than they have not seen at home, because the way to Europe has been made broad, comfortable and "fashionable!"

In 1910, barely two hundred thousand visitors were reported to our thirteen national parks and our twenty-eight national monuments, but all the east-bound Atlantic greyhounds were crowded to their capacity. We have not yet begun to use the national parks; we have not commenced to attract to them a share of the golden travel tide which is said to have taken from America to Europe \$350,000,000 in 1910.

Indeed, we are not ready for visitors in our national parks. We have, as yet, no national park system. The parks have just happened; they are not the result of such an overlooking of the national domain as would, and ought to, resulted in a co-ordinated system. There is no adequately organized control of the national parks. With 41 national parks and monuments, aggregating an area larger than two sovereign states, and containing priceless glories of scenery and wonders of nature, we do not have as efficient a provision for administration as is possessed by many a city of but 50,000 inhabitants for its hundred or so acres! In a lamentable number of cases, the administration consists solely in the posting of a few muslin warning notices!

Nowhere in official Washington can inquirer find an office of the national parks, or a desk devoted solely to their management. By passing around through three departments, and consulting clerks who have taken on the extra work of doing what they can for the nation's playgrounds, it is possible to come at a little information.

This is no one's fault. Uncle Sam has simply not waked up about his precious parks. He has not thrown over them the mantle of any complete legal protection-only the Yellowstone has any adequate legal status, and the Yosemite is technically a forest reserve. Selfish and greedy assaults have been made upon the parks, and it is under a legal "joker" that San Francisco is now seeking to take to herself without having in ten years shown any adequate engineering reason for the assault, nearly half of the Yosemite. Three years ago several of us combined to scotch and kill four vicious legislative snakes under which any one might have condemned at \$2.50 per acre the Great Falls of the Yellowstone, or even entered upon a national cemetery for the production of electric power at the same price for the land!

Now there is light, and a determination to do as well for the nation as any little city does for itself. The Great Father of the nation, who honors us tonight by his presence, has been the unswerving friend of the nation's scenic possessions. He has consistently stood for the people's interests in Niagara; he now stands for their interest in the nation's parks.

His Secretary of the Interior, the presiding officer of the evening, has applied his great constructive ability to the national park problem. It was at his invitation that the first national park conference was held in September last. He has visited most of the parks, and, coming from a city where intensive park development has proceeded to a greater beneficence than in any other in the world, he comprehends fully the American service park idea.

There is, then, hope for the parks. The Congress will not refuse, I am sure, to enact legislation creating a bureau of national parks, to the custody of which all the nation's pearls of great price shall be entrusted. Under such a bureau, aided by a commission of national prominence and scope, I predict that there will be undertaken not only such ordering of the parks as will vastly increase their use and their usefulness, but such a survey of the land as will result in the establishment of many more new national parks, before it is too late.

Niagara, never more in danger than at this moment, must eventually, if it is to be a cataract and not a catastrophe, come under the federal mantle as a national park. In no other way can America be sacred from the lasting disgrace that now threatens our most notable natural wonder. A nation that can afford a Panama Canal cannot afford a dry Niagara!

There is something inspiring in the thought of a national park sacred to

the memory of the great liberator, and adding to the beauty and dignity of the city in which he poured out his last full measure of devotion. The Lincoln Memorial National Park, joining the lovely forests between Washington and Baltimore and Annapolis to the Potomac, would be a thousand times more fitting tribute to the glory of our first martyr than a mere commercial highway.

He whose genius made the nation, and whose wisdom planned this Federal City to be a fitting capital for a hundred millions of free people when yet there were but a scant three millions clinging to the Atlantic seaboard ought also to be thus memorialized. Why shall not Mount Vernon and its environs come into a great Washington Memorial National Park which shall link together anew, as it reaches the Potomac, the fame of our two greatest presidents, and forever blot out a line once fought over in civil warfare?

Nothing is more certain than that

eventually the nation must come to own memorial areas which shall serve a double purpose in their tributes to the departed great and their beneficience to the living. Delay means but enhanced and compounded cost. With such a truly patriotic provision for the future as well as the present as would be involved in the creation of a great national park system, available to the people of the east as well as to those of the west, our federal scenic possessions would come to attract the travel of the world. Inadequate though they are now, inaccessible as they are 'now, unadministered as they are now, our national parks have added very definitely to the resources of our people, and are well worth while. When they shall have been given the attention that is in the minds of our president and our secretary of the interior, they will increase in efficiency, in beauty. in extent, and in benefits open to all the people, so that they will even more be entirely worth while.

AMERICAN CIVIC ASSOCIATION IN CONVENTION

The seventh annual convention of the American Civic Association was held at the New Willard Hotel, Washington, D. C., December 13, 14 and 15. The president of the association, J. Horace McFarland, of Harrisburg, Pa., presided. The morning session was devoted to an address of welcome and to the subject of "Related Civic Advance."

On behalf of District Commissioner Cuno H. Rudolph, who was called to the Capitol, "A Washington Welcome" was extended to the convention by Dr. William Tindall, secretary to the board of commissioners.

In the beginning of the "related civic advance" meeting President McFarland introduced J. Lockie Wilson, secretary of the Ontario Horticultural Association and the Canadian vice president of the American Civic Association, who conveyed "goods news from Canada."

On behalf of the National Municipal League, the Hon. William Dudley Foulke, of Richmond, Ind., spoke on "The Daily Life of Frankfort."

At 4 P. M., William Gladstone Steel gave an informal illustrated talk on "The Beauty-spots of Oregon," with partial reference to Crater Lake National Park.

WEDNESDAY EVENING.

The session was opened promptly, Walter L. Fisher, Secretary of the Interior, presiding. In his introduction he said that the national parks, like Topsey, have "just growed."

"There is now no consistent legislation concerning the parks," he continued; "in

fact, there is a wide divergence in the statutes under which they are administered. In the Interior Department we have no machinery for the conduct of the affairs of the parks, and no authority to develop machinery by which co-ordination may be secured. It has been possible to secure some publicity, because we have found the public is greedy for information about the parks. We have been able to say that the chief clerk of the departfound the public is greedy for informain determining questions of policy, but that is as far as we can go.

"We ought to have some sort of central authority—a bureau which might act not for one of the parks alone, but for all of them;" and at this point Secretary Fisher quoted from the annual message sent to Congress a year ago by President Taft, in which the Chief Executive said: "Our national parks have become so extensive and involve so much detail of action in their control that it seems there ought to be legislation creating a bureau for their care and control."

The president, J. Horace McFarland, then made his annual address, the subject being "Are National Parks Worth While." This address is printed in full on another page.

"What National Parks Mean to the West" was the topic of the address of Hon. Reed Smoot, United States senator from Utah.

"Separate appropriations are now made for each park, making it impossible for the Secretary of the Interior to concentrate the efforts of his department in their behalf," the senator said, and in this connection he referred to the subject matter of a bill, which he had introduced in Congress, which, he said, would correct this evil and would also result in a saving.

The president of the United States was then announced and with the

audience laughed at the stories of wild life in the national parks told by Enos A. Mills, of Estes Park, Colorado.

President Taft then spoke of the work pertaining to the national parks.

Herbert W. Gleason, of Boston, Mass., gave an illustrated talk on the scenic beauties of the national parks, particularly as relating to Alaska, Yellowstone Park, California, the Grand Canyon and the Yosemite Valley. His pictures were accurately colored and exceedingly beautiful. They had special reference to the legislation proposed.

THURSDAY SESSIONS.

The session was called to order by the president, who said that the business end of the association was made as simple as possible and that the association had passed the probationary "class meeting" stage and instead of educating the members of the association chiefly by bulletins and publications, it was doing a much larger work through the public press in educating the public at large and influencing legislation.

The annual report of the secretary consisted of a brief outline of the strenuous efforts to save Niagara Falls and other work which had been performed along the line of civic betterment.

The statement of the treasurer, William B. Howland, of New York, was read by Harold J. Howland.

The following officers were unanimously nominated and elected:

President, J. Horace McFarland, Harrisburg, Pa.; first vice president, John Nolen, Cambridge, Mass.; treasurer, William B. Howland, New York; secretary, Richard B. Watrous, Washington, D. C.

Vice presidents—Clinton Rogers Woodruff, Philadelphia, Pa.; George B. Dealey, Dallas, Tex.; Mrs. Edward W. Biddle, Carlisle, Pa.; John L. Hudson, Detroit, Mich.; George W. Marston, San Diego, Cal.; J. Lockie Wilson, Toronto, Canada.

Executive board-Dr. John Quincy Adams, New York; Henry A. Barker, Providence; Miss Mabel T. Boardman, Washington, D. C.; Leroy J. Boughner, Minneapolis, Minn.; Frank Chapin Bray, New York; H. K. Bush-Brown, Washington, D. C.; Arnold W. Brunner, New Work; Mrs. Caroline Bartlett Crane, Kalamazoo, Mich.; Mrs. Sarah Platt Decker, Denver, Colo.; Charles M. Dow, Jamestown, N. Y.; George Otis Draper, New York; Edward Hatch, Jr., New York; Harold J. Howland, Montclair, N. J.; Dr. Woods Hutchinson, New York; Miss A. E. McCrea, Chicago, Ill.; Miss Louise Klein Miller, Cleveland; Frederick Law Olmsted, Brookline, Mass.; Brainard H. Warner, Washington, D. C.; Mrs. Woodrow Wilson, Princeton, N. J.

"Washington a Model City" was the topic of the address of Engineer Commissioner Wm. V. Judson, of the District of Columbia.

After speaking on his views on the theory of municipal government from a constructive standpoint, Commissioner Judson asked the association to help make Washington the greatest capital in the world, saying:

ing:
"We have bills before Congress for the control of our public utilities; for the orderly and systematic prosecution of the required great public improvements in accordance with definite plans, and a well-considered program; and for the establishment, practically based on consents, of special building restrictions.

"The passage of these bills is essential if the Capital city is to attain in its development that measure of perfection which is bounded only by existing conditions and the limitations of human forethought. I ask your society to make Washington often a subject of consideration."

Arnold W. Brunner made an address on the business side of city planning. Mr. Brunner recalled some of the famous streets and centers on the continent, pointing out that with all their beauty, they were designed, primarily, to permit the easiest passage of innumerable vehicles and persons.

The morning session closed with an informal discussion of the necessity of conserving Niagara Falls and a condemnation of the boiler-plate press matter that is being distributed in the United States. President J. Horace McFarland and Secretary Richard B. Watrous spoke on this subject. They declared that the figures sent out by

interested persons regarding the Falls are inaccurate, and cover up the danger that menaces the scenic value of the great Niagara. Mr. Watrous also took a slap at the city of Niagara Falls, stating it had never spent the slightest sum in attempting to conserve the cataract

The Secretary of the Treasury, Hon. Franklin MacVeagh, presided over the afternoon session. The subject was "The Communities We Live In." George Burdett Ford took as his subject "Digging Deeper into City Planting."

In his opening phrases he commented at length upon the marvelous growth of the length upon the marvelous growth of the city planning campaign all over the coun-try. It has been a development of the past ten years, he said, although he traced the beginning of the movement to the White City at the World's Fair in Chicago in 1893. "The leaven worked slowly," he continued, "and it was not until about 1900 that our Capital city launched forth its splendid program of development. Then followed Cleveland, with its magnificent conception for a civic center, and each year more and more cities fell into line, today actually a hundred cities have or are taking thought for their future velopment. "But beauty seems to been the keynote of all," he said, while beauty is a desideratum, we "and tion whether we can with equanimity stand by and help the city spend its money on frills and furbelows when only a step away the hideous slum is sapping the very life blood of the city. But the great human blood of the city. But the great human city planning idea is at hand, and in the future such movements will begin with profor the homes of the people, and visions from this basis work outward into beauty combined with civic healthfulness.*

Speaking to the topic, "Modern Street Lighting," as related to "The Communities We Live In," C. L. Eshleman, of Cleveland, Ohio, summarized under four headings the reasons why street lighting, which is both ornamental and adequate, meets with popular favor, Mr. Eshleman said:

"Because of the important part it plays in the movement for the city beautiful—artistic as well as utilitarian;

"Because of the advertising value to the city as a whole, as an indication of its prosperous condition and progressive spirit—a well dressed city, like a well dressed man, commands attention and respect;

"Because of the benefit in dollars and cents accruing to the business interests in the lighted district—the value of property on a business street is directly proportionate to the number of people who make use of the street as a thoroughfare—light attracts people;

make use of the state ——light attracts people;

"Because of the increase in property values and the decrease of crime."

The Hon. Frederick C. Howe, of New York City, contrasted the methods in Germany with those of this country in dealing with public utilities. He said that the cities of Germany were primarily for the people, not for the landed or corporate interests. "The public utilities of this country, such as postal service, sewers, street cleaning, parks, play grounds, etc., which cost money and yield no direct returns or profit, are in the hands of the public authorities, while the income and profitable utilities like the railroads, gas and elec-

tric lighting, etc., managed by private corporations. In Germany they are all managed for the public welfare."

"The Smoke Problem" was considered by Mr. Thomas E. Donnelley, of Chicago, Ill. He gave the history of the successful efforts to supress the smoke of Chicago and gave in detail the workings of the bureau.

Results accomplished in "Swat the fly" campaigns all over the country were reviewed at this session of the convention and plans were laid for the still further elimination of the fly from the scheme of things next year.

The session opened with a display of cartoons illustrating the humorous side of the "Swat the Fly" movement and a talk regarding the origin and success of the work by Richard B. Watrous.

Mr. L. L. Leonard described at length the progress of the bill board fight in St. Louis. He showed by carefully prepared statistics that the greater part of the space on the bill boards was taken for liquor and tobacco advertisements.

He declared that billboard advertising in most cities is a public nuisance and eyesore.

He showed in a series of illustrations the difference between the advertisements in the streets of this country and the European cities.

In commenting on the paper President McFarland reiterated in very strong language his opinion of the bill-board advertising companies who imposed upon advertisers as well as the public.

William Solotaroff, superintendent of the municipal shade tree commission of East Orange, N. J., was the next speaker, and discussed "The Progress in Municipal Shade Tree Control." This address appears in full on another page.

After the reading of the paper Mr. Solotaroff showed a number of pictures illustrating the methods in use in Europe for growing trees along the roads and streets, in what are considered unfavorable locations.

Leroy J. Boughner, president of the Garden City Club of Minneapolis, and city editor of the Minneapolis Tribune, sounded before the convention the slogan of what promises to be one of the most aggressive campaigns next year of the American Civic Association, in the new work which it will prosecute to secure a more universal recognition of civic and economic values of "vacant lot gardens."

Mr. Boughner's address was descriptive of the results secured in Minneapolis in the summer of 1911 by the Garden City Club.

Club.
The Garden Club of Minneapolis in 1911
had planted in vegetables and flowers 360

vacant lots, or approximately 2,225,000 square feet, of which 2,000,000 square feet were planted to vegetables. The city was divided into six districts, about 60 gardens to a district, each district being in charge of an assistant gardener furnished by the Minnesota Farm School. Careful instruction in gardening thus was universal, and an idea of the extent of the work may be gained from the fact that the club gave away 28,000 cabbage and tomato plants. The nasturtium was adopted as the official flower of the club, and 22,000 packets of nasturtium seeds were distributed, in addition to which 10,000 packages were sold.

Mrs. Edward W. Biddle, of Carlisle, Pa., presided and opened the session with brief remarks on the successful results of the work for the betterment of children by outdoor amusement and employment. Mrs. John W. Reily, of Fort Hunter, Pa., was introduced and told the story of the garden schools of Harrisburg, Pa.

Miss Zona Gale, of Portage, Wis., read a story: "The Election in Friendship Village."

A committee on resolutions consisting of Warren H. Manning, Frederick L. Ford and Frank Chapin Bray were appointed. They reported the following resolutions:

Resolved, That the American Civic Association reaffirms its action in favor of the

Lincoln Memorial as recommended by the Fine Arts Commission.

That the protection of the Burton Bill, extended by Congress to Niagara Falls, should be made a part of and follow the life of the prevailing international treaty instead of being continued merely as a temporary provision.

That the American Civic Association heartily favors the suggestion of the President of the United States that Niagara Falls be made a national reservation.

That the American Civic Association thusiastically endorses the establishment of a National Park Bureau as favored and stated in person before this Convention by President William H. Taft, Secretary of the Interior Walter L. Fisher, and Hon. Reed Smoot, chairman of the Senate Committee on Public Lands.

INCREASED FUNDS ASKED FOR NATIONAL PARKS

For the development and care of the national parks the Secretary of the Interior has asked Congress to appropriate the sum of \$791,080, an increase of \$617,830.60 over the appropriations for the current fiscal year. The national parks constitute ideal recreation grounds for thousands of people, but their development and use are seriously retarded by the lack of adequate roads and trails, and until sufficient money is appropriated for beginning a comprehensive plan of development the parks will fall far short of rendering the important public use for which they are intended. The general public interest in these pleasure grounds is shown by the fact that in a list recently issued by the Department of the Interior, 390 magazine articles on the parks are enumerated. It is the intention of the Department to make the principal places of interest in the parks more accessible, to render traveling more comfortable by sprinkling the roads throughout the dry season, and to guard the health of the traveler by the installation of proper water supply and sewerage systems. The responsibility for the future conduct of the national parks must rest with Congress, but the department feels that the financial needs of these reservations should be clearly presented to Congress.

Some of the increased appropriations asked for the National parks are:

Yosemite National Park, from \$50,000 to \$52,740; Sequoia National Park, from \$15,550 to \$89,550; General Grant National Park, from \$2,000 to \$17,250. The items for each park are as follows:

Yosemite National Park—New road along south rim of Yosemite Valley from Fort Monroe to Glacer Point, \$75,000; improving the road on the north side of Merced River from Pomona bridge to the junction with the Coulterville road, \$50,210; continuing the improvement of the road on the south side of Merced River from Camp Amwanee to Happy Isles, \$46,750; a reinforced concrete bridge to replace the

Sentinel bridge over Merced River, \$14,000; construction of trail from Merced River Canyon to the head of the Merced River, \$5,000; construction of trail from the head of Lyell Fork Meadows to the Lyell Glacier, \$1,500; continuing the installation of the water distributing system in the Yosemite Valley, \$25,000; garbage incinerator, \$6,900; operating the present road sprinkling system, \$7,500; the extension of the road sprinkling system to Fort Monroe and Happy Isles and operation of the same, \$7,500; repair of existing roads, trails, bridges, culverts, buildings, plants, fences, camp sanitation, and removal of undergrowth, \$25,000; salaries, \$10,460.

Sequoia National Park—Widening 21 miles of Giant Forest wagon road to 18 feet and constructing drain culvert, \$25,200; constructing 40 miles of trail, \$12,000; improving 150 miles of trail, \$15,000; construction of 20 miles of telephone line, \$8,000; fencing 50 miles of the park boundary, \$10,000; completion of water system for Tourist Camp at Camp Sierra, including public drinking fountains, \$2,500; constructing a stairway and hand rail on Moro Rock, \$2,500; construction of pier, bathhouse, and a boathouse at Twin Lakes, \$2,000;

The department proposes to spend \$41,615 on the Mesa Verde National park during the fiscal year ending June 30, 1913, if the amount requested by the secretary of the interior is appropriated by Congress. This is an increase of \$34,115 over the appropriation for the current fiscal year. The main items are as follows:

Completion of wagon road to cliff dwellings, \$7,000; reconstruction and repair of constructed road, including widening, surfacing and leveling of roadbed and the building of retaining walls, \$20,000; construction of road from Spruce Tree house to Balcony house, \$1,000; repair of road traversing public lands leading to park highway, \$1,500; construction of custodian's house, \$2,500; construction of telephone line from custodian's house to Mancos, \$3,000; contingent expenses and salaries, \$6,615.

USE OF NAPHTHALENE IN ROAD TARS

As a large part of the road work in this country seems destined to be effected by the use of tars in road treatment and construction, a systematic investigation of the effect of various constituents upon the adaptability of tars as road binders is of great importance.

Hence, the recent circular issued by the U. S. Department of Agriculture on The Effect of Naphthalene upon the Consistency of Refined Tars (Office of Public Roads Circular 96) is a valuable contribution to good roads literature. While definite conclusions are not announced, the results strongly indicate four determinate facts:

- (1) That the fluxing value of napthalene for tar pitches is somewhat greater, although quite similar, to the heavier naphthalene-free tar distillates, until the mixture becomes saturated with naphthalene:
- (2) That for the harder tar pitches the addition of very small percentages

of naphthalene will produce a marked increase in fluidity.

- (3) That for the softer pitches the addition of naphthalene in small quanincrease in fluidity.
- (4) That where naphthalene is added beyond the point of saturation a rapid decrease in the fluidity of tars at temperatures below the melting point of naphthalene is observed, but at temperatures above its melting point the fluidity continues to increase.

PARK NEWS.

The superintendent of Crater Lake National Park, Oregon, in his report to the Secretary of the Interior, has asked that the area be enlarged. The deer, which are very numerous in the summer time, are being decimated by the hunters as they leave the park for more favorable winter quarters, which do not happen to be under government ownership. The present area is 121/2 miles east and west and 181/2 north and south, 249 square miles. The superintendent proposes to have included in the reserve nine miles to the north of the park and 24 miles to the west, which would increase the park to three times the present area and take in territory north of the Rogue river, the headwaters of the Umpqua and Elk creek.

The Seventh Ward League of Portland, Ore., has unanimously adopted a resolution favoring a bond issue for the purpose of acquiring real estate to be used for park and boulevard extensions and development in Portland. Park Superintendent Mische, the principal speaker at a recent meeting, referred to the immediate necessity for park development in Portland and reviewed the progress of this kind of work in other cities. A bond issue of \$2,000,000 is suggested.

In connection with the recent strike of garbage collections in New York City, Mr. James H. Griffith sends the following: "Strange as it may seem, New York City is collecting its garbage and ashes in the old-fashioned metal carts, drawn by horses, steel shod, and driven by 'white wings,' who whistle, sing and talk to their horses in a variety of foreign languages. This condition would be bad enough if the work was done during the early morning or late evening, but it is done in the middle of the night between 11 p. m. and 3 a. m. In addition to the noises of the metal cans (required by law) as the contents are dumped in the carts, is the rattle and rumbling of the carts through the streets on their way to and from the dump. While smaller cities are doing the work quickly and with practically no noise, or annoyance, by the use of rubber-tired auto trucks with protected sides, New York City still adheres to the old noisy system. It is probably doing more to make the administration of Mayor Gaynor unpopular than any other one thing."

The city officials and the park board

of Dallas, Tex., have been looking over a five-acre tract with a view to acquiring it for a negro park.

Chairman Charles H. Wacker, of the Chicago Plan Commission, in advocating more parks, says that, whereas an acre of park should be provided for every 100 inhabitants, there are about 780 to the acre in Chicago, and that "innumerable statistics are on file to show that the city can create the finest park system in the world out of its waste material without costing the tax-payers anything to speak of."

Prof. L. R. Taft, of the Michigan Agricultural College, has been inspecting the city trees of Jackson, Mich., and has found them seriously affected with the San Jose scale, and he told the authorities that every tree should be inspected and that it would require three inspectors to cover the job. The only real remedy is spraying. This pest, destructive as it is, is most prolific and can reproduce a million of its kind in a year. This means early destruction of city trees unless effectively and persistently fought. It was at first considered that this scale confined its ravages to fruit trees, but experience has disproved this at considerable cost.

In "Daily Consular and Trade Reports," Consul General W. H. Michael, Calcutta, India, says: "The tar-macadam road has given the best satisfaction of any kind of street surfacing yet experimented with. On small stones, evenly spread, the tar is placed, then another layer of stones, and the whole rolled. It is finally covered with stone dust and rolled hard. It requires only a few months to become quite durable."

As a result of the retrenchment of the common council of La Crosse, Wis., in all departments of the city government, in order to keep the tax rate down to 21 mills, the board of park commissioners finds it will be unable to complete the levee park, costing \$75,000, the coming year. The board asked for an appropriation of \$17,000 for 1912, and was granted only \$10,000 in the budget.

Legislation enacted in the last General Assembly of Indiana, which becomes operative on January 1 next, will open the way for the development of the Terre Haute park system. It will give the park board a freer hand and broader authority.

The Cincinnati, O., park system has made a wonderful growth in the last five years, but the next may probably make even a better showing. Prior to 1908 there were five parks, having an acreage of 395. November, 1911, finds 52 parks in existence, covering 1,550 acres, while in prospect the number may be increased to 150. Total cost of old and new parks to date, \$3,833,000.

Huron Cemetery, Kansas City, Kan., over which there has been so much trouble for a long time past, owing to the refusal of two Indian descendants to move off, is apparently now close to settlement, a committee of Wyandotte Indians from Oklahoma having come up to arrange for its purchase by the city. The bodies of the Indians buried there will be removed, but a granite monument will be erected as a historic memorial.

An ordinance appropriating \$250,000 for the purchase of Old St. Paul's Cemetery, at Lombard street and Fremont avenue, Baltimore, Md., for use as a public park and playground, has been favorably reported to the First Branch of the City Council by the Committee on Parks, and referred to the Board of Public Improvements.

The special commission appointed by the last legislature of Massachusetts to examine into the proposed North Shore Marine Park, will report to the legislature of 1912. The scheme proposes to construct a large dam at the outlet of Danvers river between Salem and Beverly, which will convert the six tidal streams located in Salem, Beverly, Peabody and Danvers into a marine park of some 570 acres. Such a beauty spot will, in one of the greatest historic sections of the country, add to the already intense interest in the locality.

The Parks Commission of Galt, Ont,, has asked the Town Council to submit a by-law to the people to raise \$10,000 to be spent for park purposes. At the present time the commissioners receive half a mill on the assessment, but the commission has such a debenture debt now that it is a burden, as the commission has not enough money after paying the debenture debt to do any permanent work.

It will cost the Fairmount Park Commission of Philadelphia, Pa., about \$75,000 for the ordinary maintenance supplies for 1912. Proposals for these were opened last month.

The local regulations of Spokane, Wash., has had a very deterrent effect on bill board advertising in that city. An ordinance prohibits glass, cloth or wood signs or signboards near buildings and only steel signs are permitted. Another ordinance exists that regulates electric

street signs and prohibits the unsightly board signs of earlier days. The park board has for years prohibited the painting of any signs on the rocks or other property of the city under the control of the park board and this rule has been enforced and as a result park property is not disfigured in any way on this account. Another fact worthy of attention in regard to Spokane: it is now a misdemeanor for a property owner to allow certain weeds to grow upon his land. If he does not cut them down, the overseer has the work done at the owner's expense.

The Park Commission of Birming-ham, Ala., has recently purchased park properties to the value of \$130,213.85.

By authorizing the city engineer to survey the 625 acres in City Creek canyon and around Ensign Peak, the council of Salt Lake City, Utah, recently took the first official step towards launching the \$1,500,000 parking plan adopted by the board of park commissioners.

Embodied in the twenty-third annual report of the City Parks Association of Philadelphia, Pa., issued a short time ago, are a number of plans for proposed improvements to the topography of the city, designed for the purpose of providing for the future growth of undeveloped areas and rehabilitation in built-up sections. In the history of the Association there has been no year so full of notable events forecasting the improvement of Philadelphia, and this emphasizes the need of a Parkway, outer parks and better transportation facilities.

The Board of Park Commissioners of Cincinnati, O., were recently notified by Mrs. Frank Perin that she will donate the lot at the northwest corner of Freeman avenue and Hulbert street for park and playground purposes. The Commissioners have realized for a long time the necessity of locating a playground in that neighborhood. The gift is made in memory of her father, William P. Hulbert, and is to be known as Hulbert Park. The lot has a frontage of 104 feet on Freeman avenue and 250 feet on Hulbert street.

It is the intention of the city commissioners of Mobile, Ala., that the horticultural embellishments of the public parks of that city shall be as up-todate as it is possible to make them with the co-operation of the federal bureau of plant industry. Many varieties from the far orient, known to be suitable for its climate, will be introduced.

While in Wellsboro, Pa., recently, lecturing before the Tioga County Historical Society, Mr. Simon B. Elliott, of Reynoldsville, a member of the State Forestry Commission, warmly advocated the proposed purchase by the State of

the 10,000 acres of virgin white pine located in Jefferson, Clarion and Forest Counties, with a view to converting the tract into a magnificent State Park.

FROM PARK REPORTS

The Forty-second Annual Report of the Buffalo, N. Y., Park Commissioners, dated July, 1911, contained reports of the several officers of the department. During the fiscal year there was expended \$271,893.02 for the general maintenance of the system, and attention is drawn to the large extra cost of maintaining the roadways under the severe wear of the automobiles. It is also noteworthy that there has been quite an awakening of the citizens to the additional beauty of the city created by the work of the Department of Forestry. A new greenhouse was completed during the year, a much needed addition to Delaware Park, and the new greenhouse in Humboldt Park was also added to the propagating facilities of the establishment. While no very large pieces of improvement were carried out, the smaller jobs were numerous and of a costly nature. The report of the Director of the Botanic Garden is very satisfactory, large additions to the collections, both hardy and tender, having been secured. The number of students is increasing. In the Zoological department \$100,000 became available, which is to be spent in the construction of new buildings and the remodeling of old. The lack of funds has greatly hampered this department. The city Forester carried out a vigorous campaign against the Tussock Moth, the arch-enemy of Buffalo's shade trees, and 16 spraying outfits were in operation for the work. The forestry department was a very active one during the year.

NEW PARKS

Minot, N. D., recently offered for sale \$31,000 of park bonds, which will be used to begin a park system for that place.

Plans for a public park on the old City Hall site of St. Louis, Mo., are being agitated, and the cost would not be heavy. The park, it is claimed, would fit in excellently well with the Civic Center scheme of the City Plan Commission.

Plans for the opening in 1912 of four new parks on the South Side, Chicago, and the establishment of public bathing beaches in Jackson park south of the German building have been announced in the annual report of the board of South park commissioners. On Dec. 11 the commissioners reached an agreement with the Illinois Central railroad regarding the riparian rights to the lake shore from Twelfth to Fifty-

First streets, which provides for a home for the Field museum.

Consulting Engineer F. E. Trask has recommended to the City Council of Ontario, Calif., the parking of a 40-acre tract, between East I and Fourth streets. The property is owned by the city.

The ground for several new park improvements has been bought by the authorities of Kansas City, Kan. H. E. Dean, commissioner of parks and public buildings, will be allowed \$86,000 to be used in making improvements on these grounds, and the city can issue bonds to acquire new park property for any amount up to \$150,000.

Mayor Gaynor, New York City, recently approved the aldermanic resolution for the purchase of the Dreamland site for a park at Coney Island, at a cost of \$1,000,000. The site covers seven acres of land, and the purchase has already met the approval of the Board of Estimate.

The gift to the city of Pittsfield, Mass., of Springside Park, a choice bit of Berkshire landscape, containing 10 acres of woodland, meadow, natural spring lake, hill and vale, will be a worthy memorial to its public spirited official Mayor Kelton B. Miller. The little lake was the first Pittsfield water supply, its outlet being piped to various farmhouses in the immediate vicinity years ago. Later the lake and its surroundings became the playground for a boys' school, and as such became known as "Tetley's Pond."

Starved Rock passed into the hands of the state of Illinois on Dec. 15. The sum of \$146,000 was paid for the 290 acre tract, and that it is expected will prove to be the nucleus of one of the finest state parks in the country. It lies ten miles west of Ottawa on the south side of the Illinois river and in addition to Starved Rock proper consists of precipitous cliffs, canons, and glens, which rival many of America's most beautiful scenic wonders. No spot in Illinois is richer in history or legend than Starved Rock, which was visited by the early French missionary explorers and was the scene of numerous bloody conflicts between Indian tribes. Upon its lofty summit the Illinois warriors made their last stand, and after being starved, were finally exterminated by their enemies.

The citizens on Highland Avenue, Birmingham, Ala., propose to expend \$10,000 on beautifying a park tract in the neighborhood of 26th Avenue.

A pretty wooded tract of land in East Millville, N. J., to be known as Brinton Park, has been turned over to the city for the use of the public, by the donor, Mr. S. Percy Brinton, and has been formally received. The new park contains about ten acres and is an ideal

spot and the city contemplates making it one of the most beautiful places in South Jersey. Stone gates have been erected at the two entrances and bronze tablets bearing the name of the park and the donor, and the date of the transfer, have been placed in position.

The Park board of Charles City, Ia., has settled the question of a site for a large city park by selecting Sherman woods. It will cost \$10,000.

The Park Commissioners of Minneapolis, Minn., have accepted the offer of W. D. Washburn, who tendered the "Fair Oaks" property of ten acres for \$200,000. It is located on 3rd Avenue S. and Stevens Avenue, 22nd and 24th Streets. It is acquired under the Elwell Act.

The park area of Fort Worth, Tex., has been increased from the City park of less than 30 acres in 1908 to about 230 acres at the present time. A recent estimate puts the total value of the park properties at \$460,000. Up to about four years ago the city made so little provision for parks that the care of the City park was turned over to the Civic Committee of the Federation of Women's Clubs, which got its funds from a meager appropriation by the city and from its own efforts in raising money. In the spring of 1908 the Fort Worth Park League was organized and this organization took up with the City Commission the question of getting a definite and intelligent city plan. George E. Kessler of Kansas City was invited to Fort Worth and his visit resulted in his being employed to prepare a Fort Worth plan. An amendment was added to the city charter providing for the appointment of a Park Board, to serve without pay.

A committee of Danish-Americans, of which Dr. Max Henius of Chicago, is chairman, has purchased 400 acres of picturesque country in Denmark, at a cost of \$10,000, which is to be held as a reservation and known as the Danish-American National Park. It is expected that the park will be the Mecca of visiting Americans. It is planned to deed the property to the Danish government, with the proviso that no buildings be erected, that the park be open at all times to the general public and on every Fourth of July be given over to visiting Americans.

A public petition has been presented to the city council of Denver, Colo., to submit to the voters at the next election an amendment of the charter authorizing the city to acquire for park purposes lands outside the corporate limits.

The Park Board of Milwaukee, Wis., has asked the City Council for an appropriation of \$119,000 for special im-

provements, including \$40,000 for the proposed Gordon park bath house, \$30,000 for a civic center in Lapham park, \$24,000 to establish a forestry department and \$25,000 for a Lake Park protection pier.

Property worth \$21,000 has been presented to the Hinsdale school, Pueblo, Colo., by the north side school board. This property will be used for playground purposes and will fill a long felt need at this institution.

The City council of Deland, Fla., has passed an ordinance prohibiting the defacing of fences by bills and the sidewalks by chalk and paint signs.

The report of the Park Committee of the Chamber of Commerce of Denver, Colo., proposes a chain of outside parks for that city. This is to begin at a point in the vicinity of Lookout mountain, to continue with a tract in Bergen park, take in the Bear creek above Evergreen, part of Spruce park, Eden park, thence follow the Turkey Creek canon to its mouth. It was from the vast region immediately tributary to Denver and extending from South Boulder creek to the Platte river and from the foothills to the Continental divide, that the committee was forced to make its selections. The proposed claim will embrace every character of scenery, the view from the plains, overlooking Denver, the view toward the main range, the open rolling parks, the charming canons, and the region of the forests, the running water of the Bear creek section, and the wild flower locality. It will be a park combination probably unsurpassed by any city in the world, and according to estimates will be comparatively inexpensive, compared with the results to be secured.

The first cemetery ever offered for sale in Hamilton county, O., was advertised to be sold at auction will be sold under the hammer in Delhi township, next month. The old graveyard on the hill on Neeb road, which has been abandoned since before the civil war, is to be given over to the living. The property belongs to the township and was bought in by the school trustees, to be used as a public playground.

Sinnissippi Park, Rockford, Ill., is to be enlarged, some adjacent property having been secured by the district park board.

A new Central Park, New York City, is in process of development, or more correctly the old park is being rejuvenated in some important particulars. A new order of things is being instituted, for whereas the old idea was to shut out the park from outsiders by heavy planting of trees and shrubs

along the borders, the new scheme is to thin out the cables so that people on the outside of the boundaries may see the beautiful views within. This has been quite a large undertaking.

Within the past few weeks during the mild weather, more than 27,000 trees and shrubs have been planted in the local park system, of Harrisburg, Pa. Most of these were placed in Wildwood park. The comprehensive planting scheme of Warren H. Manning, landscape architect, was carried out in the general planting and beautiful effects are expected, especially along the new stretches of road in Wildwood.

The Greenfield, Mass., Rural club, one of the oldest of the town, voted to pay to the park commissioners of Greenfield the sum of \$280, to add to the appropriation of the town of \$1,500 for the erection of a tower on Poet's seat, Rocky Mountain. The park commissioners have arranged for the construction and completion of the tower, on or before July 1, 1912.

The Binghampton, N. Y., Park department has recommended that more attention should be given to the smaller parks this year. It is planned to erect a shelter house in Ely Park.

Mayor Ellis, of Grand Rapids, Mich., is trying hard to push the work of improving the recently acquired sites for play grounds so that some use may be made of them the coming summer, and is to be commended for his zeal in a good cause. Mr. Goebel, park superintendent, estimates that the preliminary leveling and grading on the various play grounds will cost some \$25,000,

Sulphur, Okla., is rejoicing in the fact that the Secretary of the Interior has recommended the expenditure of \$55,353 for improvements in Platt National park at Sulphur, in the way of a new administration building, sewers, driveways and bridges.

Extension of the Winchester, Mass., parkway, as voted several months ago, has been made definitely possible by the purchase for \$87,000. of the Whitney Mill property and flowage rights. This clears the way for the elaborate plans for developing a water course and a series of drives, something after the fashion of the Back Fens in Boston.

Resulting from negotiations which have been going on for several weeks, the Park and Boulevard Association of Quincy, Ill., will be able to provide an addition to South park, South Quincy. After plans by Mr. O. C. Simonds, a dignified and beautiful entrance will be added to this park, and it will be a forerunner of further improvements in the locality.



PROGRESS IN MUNICIPAL SHADE TREE CONTROL

An illustrated address by William Solotaroff, secretary and superintendent of the Shade Tree Commission of East Orange, New Jersey, before the Annual Convention of the American Civic Association, Washington, December 15

In a democracy where there is a strong individualism and where there is lack of co-ordination and interdependence between adjoining municipalities and states, any movement no matter how obvious its benefits may be to those who have carefully and impartially studied it, must necessarily be slow of progress because the basis of its success must lie with the individual. Such movements, therefore, as for conservation, good roads, town planning, shade trees on streets and roadsides are slow in their progress for two reasons. Long and persistent educational work is necessary to bring the people to a realization of their benefits, and secondly in their execution or practical operation existing prejudices or conflicting interests must be overcome. Every one will admit that more trees are better than no trees, that a good road is better than a bad road, that a well planned city is better than a city that just grew; but, let any one try to conserve our forests, build good roads, or plant shade trees and he will find his task not an easy one by any means. A prominent citizen of Pennsylvania, for example, writes that the chief bar to getting the shade tree law adopted in his city is the head of the Telephone company there

The city of Washington offers the most mature results of the system of the municipal control of shade trees. It has more trees and a greater variety of them than any of the capitals of Europe. Last summer the writer had the opportunity of going abroad to study tree planting on streets and roadsides in Europe. Nowhere in the world are trees grown under more severe and almost impossible conditions than in Paris. The examples of Paris, London, Cologne, Dresden and Berlin offer the most convincing proofs that even under the most unfavorable city conditions trees may be grown, if the right species are chosen. if the trees are carefully planted and above all if proper provision is made for their future care.

The trees of Washington have never

been fully appreciated, or it is strange that its example of public control was not followed by other cities much sooner than was actually the case. The department for the planting and care of trees is officially known as the Trees and Parkings Division of the District of Columbia, and was organized in the year 1872. There are now over 95,000 trees along the streets, all of which were planted under municipal control and paid for by the City.

Trees on the streets may be planted either by individual land owners or public officials. The results obtained in cities where the task is left to the property owners have been very unsatisfactory. The trees on the same street bear evidence of the diversity of taste of the planters. There are half a dozen or more species on the same street, undesirable mixed with desirable, of all shapes and sizes, set either too closely or too far apart. In some cases the trees are not trimmed at all and the limbs are so low as to touch the heads of pedestrians; in others they are pruned too high. The trees have been left unprotected by guards, many of them have been bitten by horses, and there is evidence that they have been injured by insect pests.

It is only when planting and care of street-trees is vested in a special department that all the principles essential to secure the most stately and impressive effects of highway planting can be applied; such as the choice of the proper species, the use of one variety on a street, setting out of specimens at uniform and proper distance apart.

The real progress in municipal control may be said to date from 1893 when the State of New Jersey passed a model statute to provide for the planting and care of shade trees on the highways of the municipalities of the state. The other states that have passed the most advanced laws along the lines of securing the more general adoption of the system of municipal control of street trees are Massachusetts and Pennsylvania. Massachusetts, in 1899, passed an

act providing that every town must elect a Tree Warden, and defined the duties and powers of the office. In 1907 Pennsylvania passed a shade-tree law, modeled after the New Jersey Act of 1893 and its amendments. The laws of New Jersey and Pennsylvania which provide for the establishment of shade-tree commissions are not of general application to all municipalities but are of local option. They become operative in a town or city only after adoption by the town or city council. Up to date fortysix towns and cities in New Jersey have established shade-tree commissions, as follows: Allendale, Arlington, Bayonee, Helmar, Bloomfield, Bogota, Caldwell, Camden, Chatham, East Orange, East Rutherford, Elizabeth, Garfield, Glen Ridge, Haddonfield, Hasbrouck Heights, Haworth, Irvington, Jersey City, Kearny, Lakewood, Madison, Maywood, Metuchen, Montclair, Morristown, New Brunswick, Newark, North Plainfield, Nutley, Passaic, Paterson, Perth Amboy, Plainfield, Point Pleasant, Rahway, Ridgefield, Ridgewood, Riverton, Roselle, Rutherford, South Orange, Tenafly, Vineland, Westfield and Woodbury. The Pennsylvania statute has been adopted by eight cities, as follows: Ambridge, Carlisle, East Washington, Pittsburg, Phoenixville, Sewickley, West Chester and Wilkes-Barre.

Briefly the provisions of the acts of New Jersey and Pennsylvania may be summarized as follows:

When by resolution of the city council it is decided that the law shall become operative in a city, then from that time all matters pertaining to shade-trees are placed in the hands of the respective commissions. All work is carried on in a systematic way and the trees are planted, pruned, sprayed, and removed under the direction of the commissioners. Wherein these commissions differ from other similar bodies is that they have the power of initiative in the matter of planting. They decide that a certain street is to be planted and determine the species of

trees. An advertisement of the intention to plant is inserted for two weeks in the public newspapers, and all persons interested in the improvement are given an opportunity to be heard. After the work is done the commissioners meet and certify a list to the receiver of taxes on which are given the names of the owners in front of whose property trees were set out and the cost of the work. These assessments are entered by the receiver of taxes on the annual tax bill and are paid the same way as any other legal lien. The cost of pruning, spraying, removing dead trees and repairing old ones is provided for by a general appropriation.

The laws of Massachusetts in regard to the planting and care of shade-trees in towns and cities are very progressive. The "Tree Warden Act" of 1899 provided that every town must elect a tree warden, and defined the duties and powers of the office. This act did not apply to cities; but by the laws of 1910 the "Tree Warden Act" was extended in practically all its provisions, except that requiring the election of a tree warden, to the cities of the commonwealth as well. Thus the act of 1899 and its amendments secure the regulation of the planting and care of shadetrees in practically every town and city.

In the year 1904 the legislature of the state of Ohio granted the cities the power "to regulate the planting, trimming and preservation of shade-trees in streets, alleys, public grounds and places, and to provide for the planting, removal, trimming, and preservation of such trees and ornamental shrubbery." In the city of Cleveland there has been an active tree department since 1907.

The shade-tree laws of New Jersev and Pennsylvania have served as models for cities to organize tree departments when there was no state law giving municipalities that power. Chicago and New Orleans may serve as examples. In January, 1909, the writer was called to Chicago by the Chicago Woman's Club, to help in its campaign for tree protection and the placing of its trees under municipal control. A public meeting was held in Fullerton Hall on January 31, when there was appointed the Chicago Tree Committee. As a result of the labors of this committee the Chicago council passed an ordinance on March 22, 1909, placing the streets trees under the control of the Special Park Commission of that city and created the office of city forester, which was filled in May, 1909. The experience of New Orleans was similar to that of Chicago. A meeting was called by the New Orleans Tree Society for February 4, 1909, at which meeting the writer was afforded an opportunity to explain the New Jersey statute and its practical working. The result of the meeting was an announcement that the mayor would call a conference of the park officials and others interested in tree planting. The efforts of the New Orleans Tree Society bore satisfactory results. On May 5, 1909, the city council of New Orleans passed an ordinance creating a parking commission that would have exclusive control of the planting and care of shade-trees. The sections of the ordinances of Chicago and New Orleans creating the tree departments were drawn largely after the statutes of New Jersey and Pennsylvania.

By an act of the year of 1902 the laws of the state of New York, the jurisdiction of the Park Boards of Greater New York was extended to the preservation and planting of trees on the streets of the several boroughs. This act, however, is not adequate in its provisions for the planting of new trees or the replacing of dying specimens and the only systematic work in the care of trees has been carried on in Brooklyn for the past six years.

On April 5, 1906, the city council of St. Louis passed an ordinance creating the office of city forester defining his duties, and regulating tree planting.

The street trees in the city of Buffalo were turned over to the care of the park department in March, 1908, through a special act of the legislature. Previous to that time the trees were under municipal control, but there was no active work done in their care and preservation. After the bill was signed by the governor and became a law the park board took no active steps until June 1, 1908, when the city forester was secured and active work begun.

On August 12, 1909, there was passed by the Connecticut legislature an act creating a Bureau of Trees in the Department of Public Works in the city of New Haven, and providing for a superintendent of trees.

Other cities having adequate provisions for the municipal control of street trees are Springfield, Mass.; Hartford, Conn.; Providence, R. I.; Detroit, Mich.; Colorado Springs, Colo.; Denver, Colo., and Redlands, Cal.

Contemporaneously with the establishing of tree departments has been the founding of organizations for the promotion of the tree planting movement, notably: The American Association for the Planting and Preservation of City Trees and the Shade Tree Federation of New Jersey.

While the progress of the municipal control of shade-trees during the past few years has been marked, it is but a beginning. Shade tree legislation needs to be made broader so as to embrace the planting and maintenance of trees on county, state and other public roads and highways. In order that we may realize the full benefit of trees, the planting must not stop at the city's gates. The systematic planting of trees on country roads is noted by the traveler in Europe, especially in France, Holland and Germany. The builders of a road should consider its decorative as well as its engineering features.

If we are to have trees in our cities there must be a place where to set them. The provision for the street tree has been a matter with which the city engineer has concerned himself very On residential streets there should be a continuous parking strip provided, at least four feet in width, along which trees may be planted. If the width of the street permits it, these strips may be made up to ten feet or more, but a width of four feet is about the minimum space along which trees can be planted. . Frequently no planting strip is provided at all, or it is made so narrow that it is impossible to set out trees. On business streets having sidewalks entirely paved, trees can be planted and maintained if sufficiently large excavations are made for the trees, good soil supplied and grills placed around their bases to prevent the soil being tramped on.

The town planner must provide for the street tree and so co-ordinate the other street fixtures that the tree's place will not be usurped. In many cities of Pennsylvania, for example, telephone and electric light poles are placed on the sidewalk next to the curb where trees ought to go and the trees are forced into the space between the sidewalk and the houses. From the roadway of such a street only the poles can be seen.

More trained men are needed as municipal arboriculturists. It is a new calling of great dignity and importance; for the tree warden or city forester is the guardian of one of the chief resources for maintaining the beauty and health of a city. His task is a greater one than simply the propagation of trees according to scientific principles. He must be an enthusiast in his work and inspire among the people of a community the proper appreciation of the value of trees. The people will then in turn help him in the administration of his office; for his success will largely depend upon the interest of the people of his town or city in their trees and the support which they give him. The writer cannot conclude without a plea for the better understanding and the support of the young men who have entered this new field of public service.

THE BEST OF THE USEFUL HARDY SPIRAEAS

An address at the annual convention of the Ontario Horticultural Association in Toronto, Nov. 16, by W. T. Macoun, Dominion Horticulturist, Ottawa.

It may be safely said, I think, that if the average person interested in plants were asked to name the best spiraeas he would immediately think of Spiraea Van Houttei among shrubs and the so-called Spiraea Japonica among herbaceous plants. We fear that with many persons their knowledge of spiraeas is limited to these two plants, and one of them is not a true spiraea, but belongs to the genus Astilbe. If this view is the correct one a paper on spiraeas should prove of value as introducing to lovers of flowers throughout Canada some of the many beautiful hardy species which can now be readily obtained.

In a comparatively recent edition of the Guide to the Royal Gardens, Kew, there are recorded 63 species of woody or shrubby spiraeas, and 28 varieties or nearly one hundred distinct sorts. Of the 63 species, 22 are hybrids or of garden origin. Of the 41 which appear to be natural species, 10 are of American, 6 of European, and 25 of Asiatic origin.

At the Central Experimental Farm there have been tested nearly 100 shrubby species and varieties. As most of the spiraeas are natives of the north temperate zone and a large proportion of them natives of the colder parts of it, it is not surprising that there should be many which are hardy or nearly so.

The woody spiraeas may be divided into two main groups, namely, those which bloom during the spring and those which bloom in the summer. The spiraeas in the former group, so far as we are aware, all have white flowers, while those which bloom in summer arc either white or pink or rose. Those which bloom in the spring are, as a whole, much more graceful and beautiful than those which bloom later on. The summer flowering sorts have the advantage of having a long blooming season, some of them flowering from June until autumn.

While there is a very large number of species and varieties it is not difficult to select the best dozen, and of these dozen Spiraea Van Houttei and Spiraea Arguta are the two best.

DESCRIPTIONS.

Spiraea Van Houttei is a hybrid species of garden origin, a cross between Spiraea Cantoniensis and S. Trilobata. It is the latter species

that gives to S. Van Houttei its hardincss, as it is a native of North China and Siberia. One can scarcely say too much in praise of Spiraea Van Houttei. Its graceful form, attractive foliage and wealth of white flowers are most striking, and it may be regarded as one of our most useful and beautiful shrubs. It blooms during the latter half of May, but while the bloom is over early in the scason the new growth which takes place provides foliage which is attractive throughout the summer. It is very effective when massed close to the house. It grows from four to six feet high.

Spiraea arguta is as hardy, or hardier, than Spiraca Van Houttei, and as it blooms early in May, before the latter is in bloom, there is no rivalry between them. This also is a hybrid species, being a cross between Spiraea Thunbergii and Spiraea multiflora (the latter of hybrid origin), and is, like Spiraea Van Houttei, more beautiful than either of the parents and hardier than Spiraca Thunbergii, which used to be the best known early blooming sort. Spiraea arguta is a graceful shrub, growing about four feet high and being literally covered with small, white flowers on slender branches in the blooming season. While the foliage is not quite so attractive as Spiraea Van Houttei, it is owing to its graceful habit quite ornamental after the blooming season is over.

AN EARLY BLOOMER.

Where it is hardy, the double variety of Spiraea prunifolia comes third, perhaps, in usefulness and beauty. It is one of the earliest to bloom, but it is too tender at Ottawa to make a good show, and is useful only in the warmest parts of Canada. The flowers are pure white, and are larger than most other spiraeas, and are quite double. This shrub continues attractive throughout the summer as the foliage is glossy and deep green in color. The autumn tints are also good.

Spiraea Thunbergii is a very early bloomer, and one of the most graceful of the spiraeas, but is not hardy enough in the colder parts of Canada. Even where it is hardy it is not so desirable as Spiraea arguta, which blooms about the same time. Spiraea

Thunbergii colors much more highly than Spiraea arguta in the autumn, and on this account is valuable for massing. It is a native of Japan, and grows three to five feet high.

Of stiffer and more upright habit than any of the four preceding spiraeas, but very showy because of its wealth of creamy-white flowers, is Spiraea Chamaedrifolia, a very hardy species, growing about six feet high. It is a native of Europe, reaching to Japan.

Spirae ulmifolia is very similar, and Spiraea media is of somewhat the same habit.

One of the most beautiful of the spiraeas is Spiraea Bracteata, often sold as Spiraea Rotundifolia Alba. The flowers of this variety are white and very conspicuous, in compact clusters and contrasting well with the rich green foliage. The species blooms early in June after Spiraea Van Houttei, which makes it particularly valuable. It is not quite hardy enough at Ottawa. It is said to grow eight feet high, but where it kills back some, four feet would be a good average. This is a native of Japan.

A spiraea which belongs to quite a distinct group from those already described, and which blooms from early summer for several weeks, is Spiraea Sorbifolia. This is now included by some botanists in another genus, and is known as Sorbaria Sorbifolia, getting its name from the leaves, which resemble very much those of the mountain ash. The leaves of this shrub are quite attractive, and when the strong stems bearing large panicles of flowers are thrown up it makes a most striking shrub. It suckers very freely, and on this account should not be grown where it is liable to crowd less vigorous sorts. It is a native of Northern Asia, is very hardy and grows from three to five feet high. Of the same group is Spiraea Aitchisoni, a native of Afghanistan. It is an attractive shrub, but not hardy enough in the colder parts of Canada.

There is a very distinct group of spiraeas which bloom during the summer months, usually sold under the name of Spiraea Callosa and varieties. These are true Spiraea Japonica and varieties. They are low growing shrubs, from two to four feet high. The wood kills back very much each year, but they bloom freely on the new wood and are very showy during the summer months. Spiraea Japonica has a wide range in the

wild state, being found from Japan to the Himalayas, and it varies considerably in the different countries in which it grows, giving rise to a number of varieties. The variety Fortunci is the Chinese form and, with its sub-varieties, give the most attractive forms, most of them being various shades of pink, crimson and rose. Some of the tints are not very pleasing as they approach the magenta. The variety Anthony Waterer is a low growing shrub with crimson flowers, not very attractive to many people, and is a variety of Bumalda, which in its turn is a hybrid between Spiraea Japonica and Spiraea Albiflora.

Spiraea Albiflora is sold by nurserymen as Spiraca Callosa Alba. It is closely related to Spiraea Japonica, and is a very useful white flowered shrub for summer. It grows only

about 18 inches high.

An attractive species which blooms in July and August is Spiraea Margaritae (Spiraea Japonica X Spiraea Superba) with pink flowers. It reaches a height of five feet.

Spiraea Ballardi and Spiraea Alba are two tall hybrid species, of which Spiraea Salicifolia, our native species, is one of the parents. They have large panicles of flowers, those of the former being bright pink, and the latter white. They grow six feet high, and bloom during July and August.

There are other summer flowering species which might be mentioned, but the color of most of them runs to magenta, a color which is not pleasing to many people.

Thus, by a judicious selection, shrubby spiraeas may be had in bloom from early in May until Au-

gust.

HERBACEOUS SPIRAEAS.

There are not nearly so many herbaceous spiraeas as woody ones. In the Kew Guide 17 species and varieties are mentioned, of which 10 are species. In addition, there are four species of Astilbes. The number of horticultural varieties is not yet very large.

Like the woody species, the herbaceous spiraeas include in their number some of the most graceful hardy ornamental plants. Most of them are moisture loving and do not do well if the soil is dry. According to recent botanical nomenclature there are no herbaceous spiraeas. What used to be called spiraeas are new referred to other genera, such as the genus Astilbe, Ulmaria, Aruncus and Astilboides, and we might not recognize some of our old favorites

under their new names. In this paper, however, we shall call them all spiraeas and by their trade names.

The herbaceous spiraea which is best known, perhaps, is Astilbe Japonica, known in the trade as Spiraea Japonica, and is one of the most popular and satisfactory plants for forcing in the greenhouse. It looks well in the house, where it should be kept well watered. It is one of the few greenhouse plants which are hardy and it can be planted outside after it has done blooming. It does best in the garden in a moist, sheltered situation. Its graceful, plumelike flowers and attractive foliage make it a very ornamental plant. There are several varieties of Astilbe Japonica, the compact form being one of the most popular. Astilbe Lemoinei and A. Thunbergii are two other species which are good for forcing, though not very satisfactory as garden plants in the colder parts of Canada.

The finest herbaceous spiraea, in our judgment, is Spiraea Aruncus or Goat's Beard, and yet this elegant plant is seldom seen in Canadian gardens. It is a native plant, being found wild in British Columbia. It begins blooming at Ottawa carly in June, and its graceful, plume-like panicles of creamy-white flowers and fine foliage with its height of from four to five feet, make it a bold and striking object in the border. There is a cut-leaved variety of this called Spiraea Aruncus Kneiffi, which is very distinct, and is so unlike the species and is such a fine plant that it should not be omitted from any collection.

Another strong growing species which requires plenty of space to show off to advantage is Spiraea Camtschatica, known in the catalogues as Spiraea Gigantea, and even finer than the type, and the most desirable is Spiraea Camtschatica Elegans. This grows from four to five feet in height and blooms from early in July to early in August. The flowers are crimson pink in the bud and white with crimson pink anthers when open.

A spiraea of quite the opposite habit of growth is the double-flowered Dropwort—Spiraea Filipendula Flore Pleno. This is much more attractive than Spiraea Filipendula, though it is also good. The flowers are double and pure white. The plant reaches a height of from 12 to 18 inches, and when it is in bloom during June and early July it is one of the most noticeable plants in the border. The foliage is fincly cut,

which helps to give the plant its graceful appearance.

Another very fine Japanese Spiraea is Spiraea palmata of horticulturists, but Ulmaria purpurea of the botan-1sts. This grows from three to three and a half teet high, with carmine flowers, and like most of the other spiraeas is very graceful. There is a good variety with lighter flowers known as Spiraea palmata clegans. Somewhat of the same type, but a much stronger and taller grower, is Spiraea lobata or Qucen of the Prairie, a species native to the United States. It grows four to five feet or taller, has deep pink flowers and blooms during the latter part of July and the early part of August. The variety of this known as S. Vanusta has flowers of a deeper shade and is equal to or better than S. lobata.

The last variety which we shall include in this list is Spiraea Ulmaria flore pleno, the double-flowered variety of the Meadow Sweet. To be at its best this beautiful spiraea should be in damp soil, where it will reach a height of four feet or more. The flowers are double and creamywhite. This spiraea blooms during July and early August and is very effective. The ordinary single-flowered Meadow Sweet is not nearly so striking.

There are a number of other good herbaceous spiraeas, but with those which have been described one would have the best of them. In closing, we heartily recommend these graceful flowers for more general planting.

GRAND RAPIDS, MICH., PLAY-GROUND PROGRESS

Grand Rapids, Mich., has every reason to be proud of her few months' record in the playground movement; and the park bond issue is hardly a year old and a permanent supervisor has been on the ground only six months. The city's park and playground development is under the administration of a Board of Park and Cemetery Commissioners. In a report of A. S. Graves. general supervisor, he says: "Perhaps the best index of the efficiency of a playground system is the attendance at special classes. This work brings the child into close personal contact with the instructor and leads to the acquisition of material benefits through special teaching. On the playgrounds of Grand Rapids for the past season an attendance of nearly 6,000 was distributed as follows: Tennis, 718; swimming, 683; gymnastics, 1,079; athletics, 689; folk dancing, 998; sewing, 1,765. The sewing classes drew large numbers.

CONCRETE SCULPTURED FOUNTAIN FOR A PARK

The concrete fountain illustrated herewith was erected in the early fall in West Side Park, N. I., and was designed and completed for its location by Mr. Pierre J. Cheron, sculptor, of New York City. It is said to be the largest decorative concrete monument so far constructed in this country, containing some 365 tons of material, and having a height of 53 feet. The sub-contract was awarded to the Erkins Studios; the architectural forms were made at the park and the concrete was cast directly in place. The sculptural features were cast in moulds made from the sculptor's models, and the whole work was reinforced throughout with iron rods. The main base of the fountain is 14 feet high. The three shelves on the curve of the base each measure eight feet across while the dolphins are six feet long. The main bowl is sixteen feet in diameter, from the center of which runs the main shaft, of monolithic construction. About the base of this shaft are three Tritons, with shells for water spouts. The shaft is fluted, and measures twenty and a half feet high and is in turn surmounted by an upper basin. The latter measures eight and a half feet in diameter and on top of it is another column seven feet and four inches in height. The eagle on the very top is two and a half feet high, making a total height of fifty-three feet. The fountain has twenty-seven water spouts and is to be equipped with 150 electric lamps. There are also twenty-four large concrete vases an equal distance apart on the basin wall.

This is a good illustration of what elaborate work can be done in concrete for the adornment of parks, and shows that both ornamental and utilitarian objects for 'the parks can be made from concrete.

Such refined work in concrete as is shown in this fountain has not tempted park officials to a very great extent up to the present, although examples of some quite elaborate bridges of moderate dimensions may be, found in a number of parks throughout the country. One has only to visit a concrete exhibition, of which three are promised this spring, to realize to how many uses in decorative construction concrete may be adapted, and the facilities for its preparation and manipulation are being so rapidly standardized that its use is sure to increase.



CONCRETE PARK FOUNTAIN. P. J. Cheron, Sc.

RELATION OF TECHNICAL MEN TO CITY PLANNING

That engineers have not contributed their proper share, as citizens, to civic betterment movements, has been more than once asserted. The special qualifications of technical men for such work, however, was presented with some emphasis in a recent address before the Electric Club of Chicago, by Wm. B. Jackson, of the firm of D. C. and Wm, B. Jackson, Chicago and Boston. Mr. Jackson calls attention to the fact that the engineer, by the demands of his profession, is continually called upon to exercise just those qualities of foresight and attention to both technical, sanitary and moral factors in business that are so much needed in all effective city planning.

In manufacturing establishments, says Mr. Jackson, much attention is given to perfecting the most efficient arrangement of avenues of intercommunication and for the progress of material in the process of manufacture, and careful attention is given to obtain processes that will fit in with the requirements of the future as well as fulfill the needs of the present. An electric power plant built to fulfill the requirements of today, without careful consideration of its ability to appropriately expand to fulfill the requirements of the future, is un-

hesitatingly classed as a blunder; yet we must admit that just this situation exists in our cities, and that on the whole our engineers and other technical men have not taken an active part in correcting the error.

When we leave the consideration of manufacturing establishments, we are prone to forget the lesson that has been learned there as the result of much experience, and we fail to apply the lesson to the wider problems of the cities. We are inclined to rest content with our cities as they may happen to grow, with very little thought of any general plan whereby the avenues for traffic will be arranged to give effective intercommunication between all parts of the city itself and between the parts of the city and the outside regions; whereby the public utilities will be arranged to give the most economical and suitable service; whereby plenty of light, air and cleanliness will be made an essential part of the city; and whereby an attractive city will be assured.

Properly laid out highways are as necessary to the efficient operations of a city as are properly planned and executed avenues for the progress of materials which are being worked up in a manufacturing establishment.

We recognize the necessity of having good air and light with cleanly conditions if we expect to obtain the most effective work from employees in a manufacturing establishment, but how much do we on the whole recognize this principle when we consider the general business community and the homes of the masses in our cities? In my opinion there would be obtained a relatively greater increase in the usefulness of the people of a great city by providing the masses with plenty of light and fresh air to grow up with and live in, than by providing plenty of light and fresh air during work periods alone.

We have a tendency to pass by the matter of an attractive city, of the "city beautiful" as something for the consideration of architects, landscape gardeners and artists alone, but this is a mistake. We are all working for better and more efficient men and women. Our points of view may be different, but we should all be striving for a common end.

Taking into consideration the tendency of the time, it does not seem to me to be quixotic to believe that the day is not very remote when an ugly spot in a city will be considered as a public nuisance in much the same way as an unpleasant odor is so considered today. It is likely that artistically inharmonious surroundings have a more far-reaching effect upon the character of our citizens than the presence of unpleasant non-pestilential odors. It is only because cities do not feel the same keen competition to which manufacturing concerns are subjected that it is possible for them to survive under the conditions imposed by lack of appropriate

plans, but that does not lessen the economic loss occasioned by such lack.

We must of necessity come to the conclusion that a city cannot grow to its most perfect stature without an officially accepted plan having the hearty support of the people, since we cannot have a most effective city unless it is laid out in accordance with such a plan, nor is it possible to otherwise properly provide for its growth.

ASKED AND ANSWERED

An exchange of experience on practical matters by our readers. You are invited to contribute questions and answers to this department

Practical Men for the Parks

A correspondent requests information as to whether the Association of Park Superintendents ever undertook an investigation to determine if practical men are employed to administer park affairs in the various cities of this country.

As we understand it the association in question is one having as its object the betterment of the service, efficiency of administration and the advancement of any object which shall add to the utility of the public's use of parks. Mutual discussion, observation by the association's members are unquestionably helpful and this alone and in itself is sufficient warrant for the continuation of the association. But it also has its limitations beyond which it cannot with propriety and wisdom proceed. One of these limitations is just this side of stirring up a public clamor over the ills of a community's affairs whereby an unfit, incompetent or even a mere "politician" holds an office of power. If such a circumstance holds in any community the fault is in the form of government or the state of public conscience in that locality.

We receive just about what we deserve and no community composed of a live, wholesome and honest citizenship will long tolerate its public affairs to degenerate into a trough at which the spoilsman feeds, nor even that positions of trust and responsibility be peddled out to incompetents. Correction of the intimated objections is to be found by the action of the people directly concerned rather than through an investigation by a society of one part of park officials.

Contrasting parallel is found in the experience of European cities where officials are selected by the local council or the person corresponding to our mayor, on merit. One hears no reproach on appointees to public park offices in Europe. Every incentive to in-

troduce a system fostering appointments tending toward subversion of public interests is frowned upon by the citizenship.

Chicago imported a conspicuously successful traction operator from Scotland to devise a means of enabling the city to control and operate the city street car system. In substance his recommendations were against the undertaking, for this very same reason, namely: politics as we have it is bad business. If you want good business rid yourself of the sort of government we are so prone to call political, meaning thereby corrupt administration. In any case, the point of our correspondent is one of good government as a local issue rather than an evil to be connected by concerted action of a body of men concerned with executive affairs of one branch of municipalities.

PARK SUPT.

Landscape Planting at Small Cost

"How can the best artistic effects in landscape planting be obtained with the smallest investment?"—R. R., Mo.

Of course this will depend entirely on local conditions where such matters as natural topography, existing trees and shrubs, location of artificial features, condition of soil, and the character of surrounding objects would be taken into consideration in planning for an artistic effect. Generally speaking, where natural effects are to be produced, the greatest amount of planting can be carried out for a given amount of money, by carefully selecting the varieties and sizes of the material used. Oftentimes for instance in the formation of groups of trees, larger, more expensive individuals may be used as a nucleus and the group finished off with smaller trees. Again where a picturesque character of planting is admissible, nursery trees which have been condemned for street plantings and are

somewhat ill-formed but nevertheless thrifty may be used in mass with no detrimental effect. In the formation of shrubbery plantings, the same procedure may be carried out, resulting in a considerable saving of money, the edges of the planting being finished by smaller stock which can be purchased at a very reasonable figure. Oftentimes, too, the most common and inexpensive trees, shrubs and perennials produce the best effects when properly used. The tendency to plant out a large variety of material and to select high class expensive stock oftentimes mars the success of the work and results in unnecessary expense.

M. H. West, Chicago. Landscape Architect.

Watering and Care of Street Trees Editor Park and Cemetery:

Answering a recent inquiry in the "Asked and Answered" department concerning the watering of street trees. One of the most effective methods of retaining the vigor and growth of avenue and street trees in a city is, without doubt, by the frequent working of the surface soil during the dry hot weather of the summer months.

While thorough watering is also effective, superficial watering, like light sprinkling of lawns, frequently does more harm than good.

Those conversant with the advantages of soil cultivation for producing continued moisture, I believe prefer this system wherever practicable,

It is the basis of the dry farming of the great arid regions of the west and in British Columbia, now resulting in transforming barren lands into vast areas of great productiveness in ordinary seasons.

The large and constantly growing use of the street trees through the activities of the shade tree commissions now operating under the shade tree commission laws of a number of the States, make this treatment of street trees a question of increasing importance.

New Jersey was the first state to enact a shade tree commission law in 1893 and in that comparatively small state alone there are thousands of street trees planted every season.

Many cities in other states where a similar law has been enacted are also making rapid progress in beautifying the public streets.

Any discussion of this subject that will call forth expert experience in the matter of treatment of the trees should be of some benefit and of public interest.

New York. F. W. Kelsey.



AN EXPOSITION IN MAKING A MODEL CEMETERY

Among the fundamental principles followed in the planning of the central cemetery of Stettin, is the one of making every individual monument create as favorable an impression as possible. Thus the so-called park lots are surrounded by hardy foliage, so that each grave may present the best possible appearance and not to be in any great measure unfavorably affected by its neighbors. The so-called "garden lots" are separated from each other by bushy trees or evergreen hedges, and through this arrangement each grave appears upon a background intended to set it off to the best possible advantage.

Ludwig Gierig, landscape architect of Stettin, says in a recent issue of Moeller's Deutsche Gaertner-Zeitung, "that it is regrettable that, as a matter of fact, there can be no semblance of a harmonious entity in this beautiful and peaceful place by reason of the fact that one can see at every step examples of monument architecture which shock one with their ostentatiousness and utter lack of art." He maintains that step by step with the growth and enlargement of the cemetery "there has also progressed the disfigurement of it by monuments lacking any artistic touch."

Herr Hannig, the superintendent, has been incessantly struggling with these influences by means of speeches and articles on the subject. In order to remedy these evils in a measure at least, an exhibition of plans and pictures of graves, and artistic models of monuments has been established in the office of the cemetery for the free inspection of the public. But so far the exhibition has met with practically no success. The undertaking of making out of the central cemetery a permanent standard for

artistic cemetery arrangement has thus far been frustrated by the element of expense.

Finally, however, Superintendent Hannig succeeded in winning over the Dürer Society of Stettin, of which he was one of the directors, to the idea of arranging an exposition of the art of cemetery and monument design. To his delight the tangible realization of this idea soon followed. The undertaking gained support of the municipal administration of Stettin, of the cremation association, and of the consistory of the province of Pomerania. The executive committee of the exposition selected for its president the well-known architect, Professor Hofert, who is also the chairman of the Dürer Society. Herr Hannig, the superintendent of the central cemetery, was entrusted with the general manage-



CORNER IN THE "URN GROVE" OF THE CREMATION SECTION OF THE MODEL CEMETERY EXHIBIT AT STETTIN.

ment of the exposition. And when, at the opening of the exposition, in the presence of the notables of the city, the president related the difficulties which had to be overcome and the trewell erected by Building Inspector Stahl. Immense baskets of hydrangeas decorated the stairway to the main hall, while the lawns were dotted with dark blue heliotropes. White benches of Among the many photographs, models, drawings and sculptures exhibited in the side halls, was a collection of drawings and photographs of the cemetery of the City of Munich from City Archi-



GROUP OF LOTS IN THE STETTIN MODEL CEMETERY EXHIBIT. Tablets of Good Design and Uniform Planting of Graves.

mendous amount of work which had to be done in order that this undertaking might be accomplished, he could well say that the greatest part of the burden had been borne by the general manager.

The detailed plans of the exhibition were prepared by Superintendent Hannig, while the management of the cemetery furnished the labor necessary for the gardening work. The entrance portals and the main exposition hall were built in accordance with the plans of the chief building inspector of the city, Herr Stahl. The stately trees on the exposition grounds add greatly to its adornment. Nearly every tree was utilized in creating the landscape effects. From the entrance of the exposition to the main hall there was a roadway lined on both sides by rows of tall evergreen hedge and beds of heliotropes. place in front of the hall was encirled by yoke-elm hedge and shadowed by beautiful old trees, through the leaves of which the glimmering rays of the sun pour in on the golden gravel. The saintly peacefulness of the place is disturbed only by the murmuring of the fountain, the work of the sculptor Cohn of Charlottenburg, and of a drinking stately and dignified lines, furnished by the management of the cemetery, invited visitors to rest and peaceful contemplation of the surroundings.

In the center of the exhibition hall was a marble statue, the work of Professor Kusthardt of Hildesheim. It represented a woman winding garlands, beautiful masses of sweet perfumed flowers being strewn at her feet. At the suggestion of the journal "The Art of Festooning," the management of the exposition had consented to add to the exposition a section devoted to festooning. Since the Stettin gardeners, however, refused to take any interest whatever in the undertaking, a single local firm, W. Blume, Artistic Gardener, undertook the decoration of this section with artistically wound flower wreaths.

Besides two models, one of the burial urn of the city of Lubeck, and one of the Stettin burial urn, epitaphs from the church in Eventin, in the District of Schlawe, decorate the central hall. These epitaphs are interesting examples of the rustic art of the 18th century, the painting and inscriptions being remarkable both for their form and content.

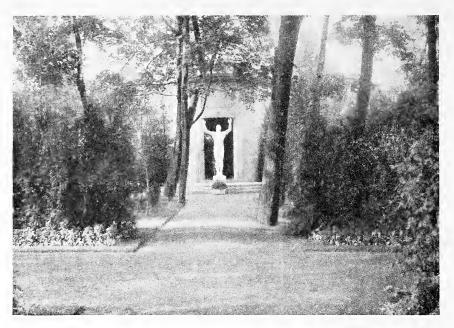
tect Grassel, and also hundreds of photographs of historical and modern monuments exhibited by the library of the royal arts museum in Berlin.

The historical section was one of the most interesting of all. While in past years many cities have had similar expositions devoted to the art of cemetery design, none of these has had a historical section of the character and scope of this one.

The management of this exposition deemed it useful to show that in this province of Pomerania, often characterized as devoid of art, there once existed the "art of cemetery-arrangement," which, like many other arts, has been destroyed by the victorious inroads of industry. The greatest portion of the material which is rich in the history of monuments, has been laboriously gathered from the rural cemeteries of Pomerania by Superintendent Hannig, and Architect Hufert.

The Oberlausitz Arts Association of Gorlitz also provided twenty-eight wrought-iron crosses from cemeteries of Oberlausitz.

There were shown here examples of the simple peasant art, the creations



VIEW IN CREMATION SECTION OF MODEL CEMETERY EXHIBIT IN STETTIN.
Showing a Family Columbarium and Statue of Prayer.

of the country joiner or blacksmith of about the middle of the last century. How much fine sentiment, how much imagination was there in many of these monuments of a forgotten time.

The forms testify to a sentiment of quiet distinction, a rich imagination, and even a certain elegance in the lines, so that one is really astonished. The ornaments and decorations are delicately constructed, often being merely indicated. Among these monuments there are some which, being newly remodeled, could easily pass for the work of a modern artist. In those days when a person prided himself on being above the ordinary run of people he merely had a gold finish put on his wroughtiron monument. Since Pomerania is not rich in stone it is natural that historical stone monuments are found but seldom; wherever they are met with, however, they are, as is shown by the models exhibited at the exposition, substantially constructed of domestic driftblock, and moulded with a fine sense of form.

All these examples of the lost art of cemetery furnishing possess a certain trait of individuality. One can see immediately that these are not wholesale or "stock" products.

The inscription always either relates to us some episode from the weary life of the sleeping one or is graced by a sententious sentence. And then the quality of the lettering is often astonishingly good. Even where the painted letters betray the hand unaccustomed to writing, the work is described as often more attractive than the produc-

tions of modern German stone "painters."

Naturally and picturesquely grouped, these monuments were scattered over the green turf, surrounded by pines and birch-trees, among which were planted shrubs of gay and varied colors, the whole showing us how beautiful avenues of graves could look even with only the old simple wooden monument. It is in Germany regarded as the best memorial for those having but a limited income. Many of the wooden monuments exhibited at the exposition have reached the age of eighty years. One of them usually lasts as long as it is

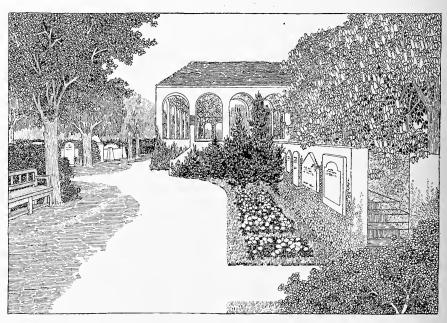
necessary for a monument to last there. "And when, in the course of time," says a German artist, "the marks of decay finally appear, the monument still stands in most beautiful harmony with the surroundings, now also no longer carefully attended to."

One section of the exposition was devoted to modern monuments of wood and wrought-iron. The department of public works of Munich, under City Architect Grassel, is also represented here by eighteen wooden monuments; they are constructed of hard wood, are standard and inexpensive monuments costing 15 to 25 marks each or about three to five dollars. The catalogue thus refers to them:

"In those splendid Bavarian models we see types of the artistic, highly developed monument architecture prevalent in the districts of our German Alps, possessing a peculiar character which stands in marked contrast to the simpler art of the wooden monuments turned out by hand in our own district."

Here also is the arrangement of the exhibit quite remarkable. It is such as to make the gay colored and richly carved monuments produce the best possible impression. Surrounded by pines and birch-trees, shaded by beautiful old trees, they stand amidst groups of digitalis plants, and asters, "alpinus superbus," in most cases adorned skillfully with flowers and moss. The idea was to show how much more complete is the harmony between wood and plants, than that between stone and plant-life.

In the section devoted to modern monuments of stone the primary object was to give the public a practical dem-



to writing, the work is described as STUDY FOR ENTRANCE OF MODERN GERMAN CEMETERY. often more attractive than the produc- Designed by Landscape Architect Richard Stegmiller.

onstration of what is needed today. Here the management of the exposition tried not only to give the monuments an attractive background, but also to lay out a model cemetery.

It is the idea of the designer that if the monument is worthless, then the whole effect is ruined, even though the floral arrangement be ever so excellent. Here all the monuments show excellent forms and lines; are built of first-class, select material and are the work of real artists. There is none which shocks by its lack of proportion; none which is conspicuous by the crude handling of the material. The lines of such a monument blend into a harmonious whole. And the floral arrangement serves only to increase its effectiveness. The custom of building mounds on graves has now been entirely abandoned. In front of the monuments we now see either small flower beds surrounded by patches of greensward or rows of flowers. All the flower-beds are uniformly planted; in one niche is the beautiful petunia, "gloriosa," further over are dark blue heliotropes; there are again heliotropes, here are begonias "Semperflorens gracilis"-but everywhere just one kind of flower. This arrangement produces with the monuments an impression of peacefulness and distinction which is in striking contrast with what we are accustomed to see on our cemeteries.

One of the illustrations shows a row of graves which are similar to what are known as garden-lots in the central cemetery. Here an excellent effect is produced by having the monuments all of a uniform height and by allowing only one kind of plant on each lot, and that in a limited quantity only. These are designed to demonstrate that the only way to improve our cemeteries is by the establishment and enforcement of rules regulating the material and height of the monuments and the kind and color of the plants and flowers in each section of the cemetery. The beneficial influence of such uniformity is well illustrated in this row of graves. How quiet and restful is the appearance of this whole section, despite the fact that the monuments vary widely in form, material, and workmanship. With even the strictest enforcement of the rules as to uniformity in height, material, and general appearance of the monuments there is still variety enough for everyone to use his individual taste in the selection of a monument. The committee empowered to decide as to the desirability of each monument proposed does not allow its verdict to be influenced by the personal tastes and views of the members but will simply decide whether, from the standpoint of art alone, a particular monument should



VIEW IN GERMAN EXPOSITION OF CEMETERY ART AT STETTIN. Showing Monuments Designed on the Same Scale, and Uniform Style of Planting for Adjacent Lots.

be admitted to the cemetery or not. Thus, for instance, there is no doubt that all the monuments here exhibited would be admitted without question to the Stettin cemetery.

Despite the fact that polished Swedish granite is used almost exclusively in the German cemeteries the German cemetery designers recommend other splendid materials which may be used in the construction of monuments. Excellent effects they say may be produced by the use of limestone, "Serpentine limestone," Rochlitz porphyry, red and green sandstone, magnesian, Silesian marble from Gnadenfrei, and others. Also many fine examples of granite were exhibited, that were neither polished nor "ground."

A fine bas-relief monument was exhibited by Architect Kusthard of Hildesheim. It is made of Rochlitz porphyry; the adding of a stairway, sidewalls, and fountain has made this a very picturesque bit of work, made still more effective by the symmetry of the surrounding foliage.

An entire section of the exhibition was devoted to providing for cremation -typifying the cremation cemetery of the future. The establishing of this section was made possible by the aid of the Cremation Society of Stettin. In the center of this part of the exhibit was a collossal temple devoted to family urns, and in front of it a collossal statue of a praying youth, the work of the sculptor Lehmann-Borges of Charlotten-The atmosphere was truly impressive in its significance here. In the shade of old German trees; on plots of grass; amidst bushy shrubbery; dainty ferns, and immense junipers were placed urns of beautiful form and splendid material.

Should the idea of cremation gain enough adherents to compel the establishment of "urn cemeteries," the combination of "urn groves" and "urn gardens" together with temples devoted to family urns would furnish wonderful possibilities for the artistic arrangement of the places devoted to the preservation of ashes. From the standpoint of the German monumental architect the idea of cremation offers many artistic possibilities.

Many friends of the idea of artistic and novel cemetery arrangement made long trips to visit the exposition and found inspiration for new ideas and new enthusiasm. Above all it was an object lesson to the public at large in showing how the resting places of the dead can be made beautiful indeed if only individuals sacrifice their own ideas for the sake of artistic harmonious effects.

The pictures shown herewith of this remarkable exposition are worthy of careful study, as demonstrating typical examples of the work of education that might be accomplished by such an exhibit. The "urn grove" and the "urn garden" are particularly original and suggestive ideas that have been developed here and in the great cemetry at Hamburg dscribed in our last issue.

The most important lesson to be learned by both cemetery and monument industries in America from this exposition is the value of educating both the professional interests and the public in the practice of a better cemetery act. Such exhibitions might well be promoted in this country by art societies, or organizations of monument dealers, sculptors or cemetery officials, and would result in far reaching benefit to every art or industry that has to do with the development or adornment of the cemetery.

CHRISTMAS WREATHS FOR THE CEMETERY LOT

A recent issue of the *Florist's Review* of Chicago urges the florists to provide Christmas wreaths for the decoration of cemetery lots, and tells them how to promote this class of trade.

In commenting on the commercial possibilities of the sale of Christmas cemetery wreaths the *Review* says:

"Christmas is a season at which the average florist completely ignores the cemetery trade. Possibly it will be argued that people are too busy buying gifts for the living to remember the dead at Christmas, or that it is not the time for reminding customers of the memorial uses of flowers, but the fact remains that many people do wish to signify, at Christmas, their remembrance of those who sleep in the silent cities. Of course, it is more or less true that the better class stores are the ones that get the calls for memorial wreaths at the holidays, but all florists can do a profitable and easy Christmas business in this line if they give it a little attention. It will be found that customers, far from finding the suggestion unwelcome, if not put forward too boldly, will welcome and adopt it. It will be noted in the course of time that those who are away from home, or whose loved ones lie at a distance, will find it appropriate at Christmas to send a wreath of green, and here is where the telegraph delivery facilities will come into play. Every florist should cultivate the exchange-of-orders business—establish connections as widely as possible and never let an opportunity pass to acquaint the public with the fact that such facilities exist."

Two illustrations are given of wreaths made last Christmas at a first-class store that found it good business to show at Christmas a line of samples of cemetery wreaths. One of these is shown here by courtesy of the Review.

In many cases customers asked what could be done in the way of sending flowers to the cemetery in cold weather, and these wreaths lay at the clerk's hand to provide the answer. Others, seeing the wreaths, asked their purpose, and, being told that they were to go to the cemeteries on Christmas morning, commented on the appropriateness of the custom and left one or more orders.

One of these wreaths was made of the now omnipresent boxwood sprays. Boxwood has become one of the Christmas indispensables. Useful at other times, it comes in handiest at the holidays and is worked up in great quantities. People are tired of the same thing year after year, so that there always is a warm welcome for anything new in the way of a Christmas wreath, whatever its purpose, and since the grocery stores have come to handle the cheap holly wreaths at prices almost as small as the quantity of holly used in the making, patrons of flower stores have been ready to buy something else. That partly accounts for the way boxwood wreaths have sprung into favor. The boxwood wreath for the window is made on a rattan ring, just as the holly wreath is, but these cemetery wreaths are made as any funeral design would be, on wire frames that have been mossed. Two or three things are thereby accomplished. An elegance is attained that is not possible with a thinner wreath; a lasting quality is imparted: and weight is given that serves to keep the wreath where it is put.

The other wreath was of the prepared magnolia leaves that now are carried in stock by practically every retail florist—they have become one of the staples of the trade and have done not a little toward making galax a less essential article than it was a few years ago. These magnolia leaves are about the handiest thing that is to be found in the average store. They keep indefinitely and, no matter how scarce stock may be, with these on hand the retailer always has the means of making up a first-class design.

California red berries were used for the touch of color that is needed on these wreaths, but holly with its berries would have done as well, or the ilex that goes under the name of Christmas red berries.

Any florist who cares to do so can devise a dozen different combinations of seasonable green and red that will do equally well and which will serve to lend variety to his work, should he have considerable going to the same cemetery.

Crosses of various sizes are used for the same purpose. The widow of a certain millionaire sends an order to her florist every year to put a cross of boxwood and red berries, an elaborate affair that is six feet long, on the grave of the dead money-maker on Christmas morning, and flower stores that enjoy a considerable Catholic trade have found it pays to show a variety of flat cemetery crosses as a part of the holiday display.



CHRISTMAS CEMETERY WREATH OF BOXWOOD.

DELICATELY WROUGHT SCULPTURED CEMETERY MEMORIAL



WIGGLESWORTH MEMORIAL, OAKNOOK CEMETERY, SYRACUSE, N. Y.
J. Massey Rhind, Sc.

Memorial monuments—perhaps especially in private grounds—call for such a delicate and restrained rendering of the subject, the human bereavement and the human hopefulness—for qualities which are so generally neglected in much of the contemporary modern art, that a work which fulfills these requirements is always worthy of notice. One of these is J. Massey Rhind's simple memorial of the wife of Henry Wigglesworth, Esq., in Oaknook Cemetery, Syracuse, N. Y. A touching grace and charm characterize this quiet figure of the mother holding her nude baby on her arm; in

the beautiful, slightly bent, head the spectator may find a most delicate suggestion of the heavy trouble, the regret, of this parting. To support the figure, the architect, Mr. Alexander Macintosh, of New York, has furnished a shaft that is quite admirable in the beauty and justness of its scale and design—the mere beauty of just proportions unadorned. It is doubtful if sculpture, with its severity, its suggestion of eternal quietness, can find a more intimate, human appeal than in these delicately wrought memorials that so successfully combine good sculpture and architecture.

DEVICES for DISINFECTING COMMUNITY MAUSOLEUMS

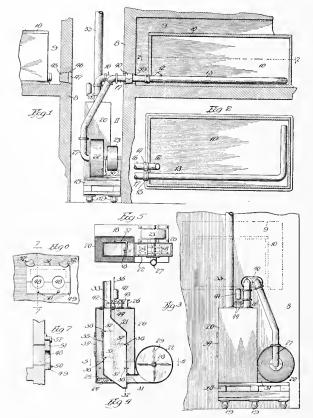
The rapid promotion of the community mausoleum business, and the criticisms that have been directed against the doubtful character of mausoleum interment as regards permanence and sanitation have led to a number of attempts to provide disinfecting arrangements or disinfecting fluids for the crypts, and two recent patents for devices of this character are illustrated here.

William R. Clayton, of Chicago has been grnated patent No. 1,002,223 for a "mausoleum" which pertains more particularly to a system of removing all moisture from the body and the interior of the casket so as to arrest decay by drying or desiccation.

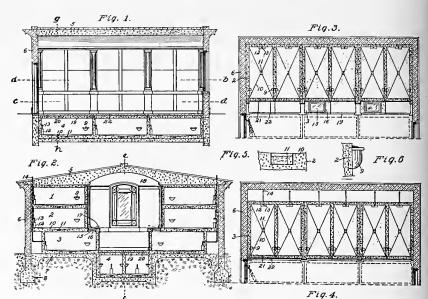
Referring to the drawings—Figure 1 is a vertical sectional view, the desiccating device being shown in elevation. Fig. 2 is a horizontal sectional view on the line 2—2 of Fig. 1. Fig. 3 is a fragmentary end clevation showing the desiccating apparatus in operating position. Fig. 4 is

a sectional elevation through the center of the desiccating apparatus. Fig. 5 is a section on the line 5—5 of Fig. 4. Fig. 6 is an elevation of a cover attached to the front end of a crypt through which the desiccating apparatus may be connected with the casket disposed within the crypt; and Fig. 7 is a sectional elevation on the line 7—7 of Fig. 6.

The caskets or coffins which are used in the present instance are equipped, when the undertaker trims them with an inlet pipe 12 and an outlet 13. The inlet pipe,



CLAYTON PATENT FOR COMMUNITY MAUSOLEUM AND DISINFECTING SYSTEM.



McKAY PATENT DISINFECTING SYSTEM FOR COMMUNITY MAUSOLEUM.

which extends but a short distance into the casket has its open end slightly upturned, as shown in Fig. 1, while the outlet pipe extends along one side and end of the casket communicating with the interior thereof near the diagonally opposite corner. The pipe 13 is made of flexible material so that it may accommodate itself to caskets of various sizes.

The portable desiccating device proper, comprises a base 18 mounted on suitable rollers 19, and carries a heating or drying chamber 20, a combustion chamber 21, a fan 22, and a motor 23 operatively connected with the fan. As best shown in Fig. 4 the heating chamber 20 is provided with a perforated bottom 24 above which is located a screen 25.

The other device illustrated here was patented by John B. McKay, of Waterloo, Ia., as No. 1,008,421, and is designed for deodorizing gases generated and disinfecting fluids seeping from the entombed remains.

Figure 1 is a vertical longitudinal section; Fig. 2 is a vertical transverse section. Fig. 3 is a horizontal of the left-hand half of the building, taken on the line a-b of Fig. 1. Fig. 4 is a horizontal section of the same half. Fig. 5 is an enlarged detail view in vertical longitudinal section, of a portion of one of the crypt floors. Fig. 6 is an enlarged detail of a portion of the wall of a crypt, showing the bracketed receptacle for holding a charge of germicidal material.

The crypts are built of reinforced concrete, having removable concrete front walls 21 provided with facing-plates 22 of marble or other suitable materials. The floor of each crypt is formed to present a concavity or hollow 10 at whose lowest part is hollowed a well containing a receptacle 11 containing an active disinfecting substance adapted to act destructively upon fluids seeping from a decomposing body in the crypt. The open upper end of the receptacle 11 may be covered by a grating or perforated plate when desired. In each crypt one or more receptacles 9 are bracketed to the walls, and filled with formaldehyde or other disinfectant. Each crypt is supplied with a receptacle 12 having an inlet adapted to receive gases from a decomposing body and pass them out through pipes 13 and 14. The two upper tiers of crypes 1 and 2 register or align vertically, with their front walls forming the general walls of the sides of the medial apartment 18.

TO MEMBERS OF THE A. A. C. S

JOHN J STEPHENS PRESIDENT GREENLAWN " COLUMBUS, O H M. TURNER VICE PRESIDENT

BELLETT LAWSON, JR. SEC.-TREAE

ASSOCIATION OF AMERICAN CEMETERY SUPERINTENDENTS

EXECUTIVE COMMITTEE
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TIONAL SOCIETIEE CONSERVING THE LANDRCAPE GARDENING AND RURAL ART OF THE COUNTRY.

CYCLOPEDIA OF AMERICAN AGRICULTURE

COLUMBUS. OHIO.

During the year now opening before us it is my most earnest desire to see our membership increased to its fullest extent. This cannot be accomplished by myself, alone, it must be by the united effort of every member, therefore I seek your kindly assistance.

Much excellent work has been done in the past years by the faithful workers, but it is the duty of every Superintendent, in justice to himself and his fellows, to uphold in every possible way this grand organization and do his share towards the general advancement.

This gathering together is the moulding and assimilating of the concrete wisdom of the many, and thus brings the members to a lively sense of their duties and privileges and a better realization of what is possible through the medium of a well supported organization to promote the fraternal spirit, with a more correct understanding and better appreciation of the nobility of our calling.

Thanking you in advance, and with kindly greetings to you all, I remain,
Yours Sincerely and Fraternally,
John J. Stephens, President, A. A. C. S.



Arrangements have been made whereby the former City Treasurer of Springfield, Ill., is to turn over to the Oak Ridge Cemetery board the funds of that body held up pending a settlement of the commission government case, which had been referred to the Supreme Court. By this move the board's treasury will be enriched by \$7,500, which has been held back.

Houston, Texas, appears to be well supplied with cemeteries, many of them very attractive. The principal burial places are: Glenwood, Hollywood, German, Evergreen. Catholic Magnolia, Hebrew, Beth Israel, and Holy Cross.

An important innovation in the method of managing the finances of the cemetery department of Waltham, Mass., has been decided upon by the Committee on Finance, and the question has been put up to the city solicitor. Heretofore the cemetery board expended the money received for the sale and care of lots, an appropriation by the city being made sufficient to cover any balance of expense that might be necessary. It is now proposed to have the city appropriate money for the cemetery department

just as other appropriations are made, the receipts for the care of lots and the sale of lots to be paid into the city treasury. This will simplify matters exceedingly and enable the board to conduct their finances in a more systematic manner than has been possible under the old methods.

Owing to an oversight in perfecting the deeds connected with the purchase of a ten-acre tract of land for cemetery purposes by the authorities of Fort Smith, Ark., legal complications ensued. When the purchase of additional ground was taken up, a tract was purchased from C. P. Wilson, although opposed by the mayor. Wilson neglected to sign the deed before presenting it, and he did not discover the defect until the time specified in the ordinance had expired. A dcal was then made for a tract adjoining the city cemetery and Wilson secured an injunction from the Chancery Court against the delivery of the warrant. The Supreme Court has rendered a decision which holds that the city had the right to purchase a cemetery at any place it saw fit. One of the principal points relied upon to sustain the injunction was the claim

that a cemetery could not be located within the city limits. The colored citizens have been badly in need of more burial land for some time past.

The Center Cemetery Company filed papers asking for the right to incorporate for the purpose of establishing a burial place. The incorporators and directors are J. B. Wallace and R. E. Dowler, of Midway, Pa., and J. M. Aiken, D. W. Smith and J. K. McCalmont, of Bulger, Pa. The home of the corporation will be in Midway and the burial ground will be in Smith and Mt. Pleasant townships. There will be no capital stock and the company asks to be allowed to have an income not to exceed \$10,-000 annually, and to be allowed to accept gifts of real estate, etc.

Fairlawn Cemetery, the Hebrew cemetery and the Catholic cemetery, of Oklahoma City, Okla., a short time since were all advertised for sale by the county for taxes, and an application for a restraining order followed, which was filed in the district court by the Fairlawn Cemetery Association against the county treasurer. The land in question is a tract of fifty-two acres, five of which had been sold to the Catholic Cemetery Association, and two acres to the Hebrew Cemetery Association, and a large portion of the remainder had been transferred to Oklahoma City residents for burial purposes. The contention of the cemetery association is that as the corporation has no capital stock and since it is not operated for profit, it is not subject to taxation under the state laws. The tax on the entire tract is \$1,000.

In a lawsuit in which a cemetery was sued as a nuisance, the Supreme Court of Georgia in a decision declares: "Cemeteries are a necessity. A place where the dead may be given decent Christian burial must be established, and the location of such must necessarily be upon some tract of land more or less suitable and commodious, and it is impossible to find a tract of land that is not contiguous to the land of some one And inasmuch as cemeteries clse. must be established, and should be located where they are reasonably accessible, it is rarely possible to so fix their location, when they are designed for the use of a populous town or city, where they will not be in more or less proximity to some residence; and unless the soil of the land used as a cemetery and that of the contiguous owners is such as to cause a drainage which will produce a contamination of the waters, thereby putting in jeopardy the health or lives of the owners of the contiguous lands, and the health of their families, or unless the air would be contaminated, courts of equity will not interfere by the grant of injunctive relief to prevent the establishment and location of the cemetery."

The grounds of the Old Stroudsburg Cemetery, one of the spots of historic interest in Monroe county, Pa., are maintained by a trust fund held for rear window cut out of this solid stone. In fact, the object throughout in this design was to avoid joints as much as possible and to use large massive stones. Scarcely any joints are visible in the photo.

The boards of directors of 16 St. Louis, Mo., cemeteries have indorsed the movement to abolish Sunday funerals. The plan to abolish the Sunday funeral was started last September at the convention of the Missouri Ceme-



THE JEFFERY MAUSOLEUM, KENOSHA, WIS. Erected by the Morse Granite Co.

that purpose. Colonel Jacob Stroud, founder of the town, laid out the burial plot, which has been filled for half a century.

It was up to the authorities of Pine Grove Cemetery, Lynn, Mass., recently, to refuse permission for the burial of "Barrie," the aged household pet of a Lynn family, in a lot in that cemetery. This was a great disappointment to the owners.

The Jeffery mausoleum in Kenosha, Wis., is one of the most substantial and well designed pieces of mausoleum construction in the west and has been given a good landscape treatment, as may be seen in the accompanying illustration. The structure was designed by Charles H. Gall, of Chicago, and executed in Barre granite by Barclay Bros., of Barre, Vt., for the Morse Granite Co., of Kenosha, Wis. It is constructed of large massive stones and the interior is very elaborate and of highly polished Italian marble. Everybody connected with it was well satisfied with the work. The principal dimensions on the ground are 14-2 wide and 21-3 long; total height 17-2. The side wall stones are made solid in dimension 12-10 long and 8-8 high. The rear wall stone is also one block and the tery Superintendents' Association, and further action will be taken at a meeting of the association to be held the second Thursday in February, and power will be given by the boards to act. The cemeteries included in the move are Bethania, Bethlehem, Concordia, Friedens, Greenwood, New Pickers, St. Peter's, St. John's, Old St. Marcus, New St. Marcus, SS. Peter and Paul, St. Trinity, St. Matthews, Valhalia, Wesleyan and Zion.

A fight over a new cemetery site, recently purchased by the City Council, of Vancouver, Wash., for \$10,351.40, when one of the Councilmen was quarter owner of the tract, will be fought out in the Superior Court. A suit has been brought by Dr. A. B. Eastham, State Senator against D. E. Crandall, City Treasurer, and also cashier of the Vancouver National Bank, and the bank also is made defendant. The plaintiff asks for an injunction to restrain the payment of the warrant held by the bank and asks that the warrant be declared null. Dr. Eastham is not acting for himself only, but for a number of interested taxpayers, who protest against having the cemetery bought in an alleged illegal manner. The plot comprises about 59 acres of logged-off land.

Indianapolis Ind., has nine cemeteries: Crown Hill, the principal one in the city; Holy Cross (Roman Catholic), Bluff Ave., and Kelly St., German Catholic, South Meridian, near Kelly street; German Lutheran, corner Meridian street and Southern avenue; Jewish, on Illinois and Tabor streets; Mt. Jackson, at Mt. Jackson; Hungarian Hebrew, Bluff avenue and Kelly street; Anderson, Tenth street, one mile east of Arlington avenue; New Crown, Churchman and LeGrande avenues.

Forest Hills Cemetery, Chattanooga, Tenn., has discontinued Sunday funerals, dating from January 1, 1912. A new road has been constructed in this cemetery to one of the "ridge" sections, which unfolds some magnificent views, including Lookout Mountain and the city.

Dr. George T. Welch, of Paterson. N. J., plaintiff in an action against the Rosedale Cemetery Association and the Linden Crematory Association, both of Union County, has demanded an accounting from the officials of the two companies, in each of which he owns fifty shares. The two cemetery associations own adjoining cemeteries in Linden, Union county, and each is identical with the other in the personnel of its stockholders and directors. The State law forbids one company from owning more than 135 acres of land for burial purposes. Welch alleges that no accounting has been rendered by the officials of the two companies during the last eleven years. He also insists that one-half of the receipts from the sale of lots be divided among the stockholders as required by law.

Fifty cents a year each for general improvement is allowed Fairview and Central Street cemeteries under the will of Cynthia M. Gray filed at Plymouth. Mass., Dec. 28. The will places the income of \$100 at the disposal of the trustees of each cemetery for the care of family lots, but provides that fifty cents of such annual income may be used for general improvement of the cemetery.

In a unique suit against the Pride of Boston, Mass., Cemetery Association and a woman named Annie Rubin, the complainant Anna Myerson alleges that Mrs. Rubin has buried her husband in a lot which she, the complainant, had purchased for herself for use when the time comes, and which is next to the lot in which her own husband lies buried. Since her rightful place beside the body of her late husband has been usurped, she wants Mrs. Rubin

and the cemetery association to disinter Rubin and bury him elsewhere.

The board of health of Pittsfield, Mass., has decided to take no action on the petition of the Love of Peace society for approval of a location selected near South mountain for a cemetery site. The petition has been dismissed without prejudice, so that it can be taken up by the board of health for next year.

The National Cemetery Corporation Syndicate, of which Reese Carpenter, New York City, is Syndicate agent, has been organizing a corporation that will control the holdings of the stockholders of a number of syndicate cemeteries distributed over the country. Forest Park Cemetery, Troy, N. Y., is included in the list, together with the following: Capitol cemetery, Washington, D. C.; Kenwood cemetery, St. Louis, Mo.; Somerton Hills cemetery, Philadelphia, Pa.; Mount Royal cemetery, Fittsburgh, Pa.; Lakeside cemetery, Erie, Pa.; Lakeside cemetery, Buffalo, N. Y.; Greenmount cemetery, Syracuse, N. Y.; Knollwood cemetery, Boston, Mass.

In an effort to induce lot owners to provide funds for the better care of Glenwood cemetery, Homer, N. Y., both for the present and future, Mr. C. O. Newton, President of the Association, has been addressing a communication to all that could be found having relations or friends buried therein, urging them to subscribe to funds for the purpose of maintaining the cemetery in good condition as well as to provide for the future care of the lots, and memorials. Some success is attending the effort, and the letters have been well received.

At its meeting in November last, the City Council of Albuquerque, N. M., granted permission for the establishment of a cemetery in the southeast portion of the city, just without the city limits. Citizens of the neighborhood believing that this cemetery would seriously affect property values, at the next meeting of the council petitioned that body to rescind the permission, which was carried unanimously.

The proceedings brought by Kansas City, Mo., to close Union Cemetery were to come before the Supreme court this month for argument on the appeal from the circuit court. In the meantime burials in the cemetery are discontinued except in unused spaces in family lots. The ordinance to close the cemetery was sustained by the lower court.

The recent purchase at Mount Carbon, below the anthracite coal belt, of ground for a new cemetery for St. Patrick's Roman Catholic parish, of Potts-

ville, was made necessary, says a Potts-ville, Pa., press dispatch, by the fact that it has been decided that no more lots will be sold for cemetery purposes in those portions of the coal region where there is any doubt as to the surface conditions. There are a number of points in this region where cemeteries and undermined, and the long-buried dead are in daily danger of clattering down to the depths of mine workings, many of them years ago abandoned, hundreds of feet below. This had been the fact in several instances in the upper basin within the last two years.

Residence voters have defeated the proposition before the board of aldermen of Asheville, N. C., to extend Riverside Cemetery to within 300 feet of Pearson drive. It is claimed that the cemetery is already too close to the city.

Shade trees along the main avenues in Forestvale cemetery, Hudson, Mass., a source of pride with the cemetery committee, were harmed by unknown people at Christmas time. The trunks of nearly all the trees on the avenue leading into the cemetery have been cut with an ax, and it is believed that the mischief was done by boys on their way to cut Christmas trees.

The State Board of Health was requested by the County Board of Supervisors, St. Louis, Mo., to visit the St. Clair County Cemetery, on the Buncum road, near East St. Louis, and inspect conditions there with a view to beginning prosecution for the alleged careless way in which the cemetery has been handled. A visit was made and a partly exposed coffin with a hole in it, was discovered. It was the second time in the last few months that this condition has been found, it is said. The slack methods of burial on the part of a former sexton are responsible for conditions

The bodies of 700 Philadelphians who died in the nineteenth century will be taken from their graves in the old cemetery adjoining Trinity Protestant Episcopal Church, Second street near Catharine street, Philadelphia, Pa.; within a few months to make way for the erection of a group of tenements. In the days before and about the time of the civil war Trinity's was one of the most flourishing congregations in Philadelphia, and the parish directory contained the names of many men and women prominent in the political, business and social life of the city. In recent years few worshippers have crossed the portals of the old church. Most of the bodies will be removed to Mount Moriah Cemetery, where a plot has been obtained by the trustees. The church will be converted into an amusment hall.

Because the Dayton & Muncie Trac-

tion Company excavated a gravel pit on the land of George T. Orr, in Randolph County, Ind., too close to the graves of members of Orr's family, the Supreme Court on Nov. 22, reversed the Randolph Circuit Court and awarded Orr damages from the traction company. Orr had leased the gravel pit adjoining the family cemetery to the company, and it had been agreed that the excavation should not proceed past the limits of the burial ground. The land caved in and endangered the graves.

A strong movement has started in Quincy, Ill., to create a National Cemetery in this city, in connection with the Soldiers' Home. The present burial ground is favored for the site, and Congress will be asked for an appropriation.

The graves at the Media cemetery, Chester, Pa., long neglected, are now being fixed up and the cemetery com-

(Continued on page XI.)

THE COVER ILLUSTRATION

On the cover of this issue, we illustrate a style of Cemetery Gateway of the popular modern type, artistic, yet modest in design. This is the Main Entrance to "Beautiful Glendale," a new cemetery located about twelve miles from the heart of Cincinnati. This attractive acreage containing some 212 acres, presents an unusual scenic effect. Forty acres have thus far been improved along modern lines and it will doubtless take its place among the well-known burial grounds.

Our illustration represents two ornamental iron drive gates with double walk gates on either side. These gates are hung on massive granite piers, 15 feet 6 inches high, with 54 inch base. Each of the drive gates is 12 feet 6 inches wide. The walk gates on either side are 8 feet high and 7 feet wide: the granite piers on which they are hung being 9 feet 6 inches high and 34-inch base. A noticeable feature of these gates is their construction, which is of exceptionally durable. All of the gates are hung on heavy bronze "Y" lugs and all the other parts entering the granite piers are made of bronze in order to eliminate the possibility of the granite being marred by weather conditions. The total weight of the ornamental iron in these gates is about 10,000 pounds.

The owners of high-class cemetery property will appreciate the importance of an imposing front such as the Glendale entrance. This especial design was executed, built and erected by The Stewart Iron Works Company of Cincinnati, Ohio, who have built a number of fine gateways of a similar character throughout the country.

TOPICAL INDEX to OUTDOOR LITERATURE

An Index to articles on Gardening, Forestry, Park, Cemetery and Civic Improvement and kindred subjects in leading general and special magazines

Subscriptions will be received for any magazine or periodical at club rates with Park and Cemetery. Publications in which articles appear are listed below, and referred to by abbreviations, thus: S. L. 8:67-8, Feb. 09, means: Suburban Life, vol. 8, pages 67-8, February, 1909, Single copies should be ordered direct from the publications at addresses given below.

PUBLICATIONS INDEXED AND ABBREVIATIONS USED.

American Botanist, Joliet, Ill. (A. B.), 75c year; 20c copy.
American City, The, (Am. C.), New York, \$1.00 year. 15c copy; back numbers,

American Florist, Chicago (A. F.), \$1.00 year; 5c copy.

American Homes and Gardens, New York (A. H. G.), \$3.00 year; 25c copy.

Architectural Record, New York (Arch. Rec.), \$3.00 year; 25c copy.

Art and Progress (A. & P.), Washington, D. C.; \$1.50 yr.; single copy 15c.

Beautiful Homes (B. H.), St. Louis, \$1.00 year; 10c copy.

Canadian Florist, The, Peterboro, Ont., Can. (C. F.), \$1.00 year; 10c copy.

Canadian Municipal Journal, Montreal (C. M. J.), \$1.00 year; 10c copy.

Conservation, Washington, D. C. (Cons.), \$1.00 year; 10c copy.

Country Life in America, New York City (C. L. A.), \$3.00 year; Single copy. American Florist, Chicago (A. F.), \$1.00

25c.
Country Gentleman, Philadelphia, (C. G.), \$1.50 year; 20c copy.
Century Magazine, New York City (Cent.), \$3.00 year; 35c copy.
Chautauquan, The, Chautauqua, N. Y. (Chaut.), \$2.00 year; 25c copy.
Craftsman, The, New York City (Cr.), \$3.00 year; 25c copy.
Embalmers' Monthly, Chicago (E. M.), \$1.00 year; 10c copy.

Embalmers' Monthly, Chicago (E. M.), \$1.00 year; 10c copy.
Fern Bulletin, Jollet, Ill. (F. B.), 75c year; 20c copy.
Florists' Exchange, New York City (F. E.), \$1.00 year; single copy, 5c.
Florists' Review, Chicago (F. R.), \$1.00 year; 5c copy.

riorists' Review, Chicago (F. R.), \$1.00 year; 5c copy.
Forest Leaves, Philadelphia, Pa. (For. L.), \$1.00 year; singie copy, 10c.
Fruit Grower (F. G.), St. Joseph, Mo., \$1.00 a year; 10c copy.
Gardener's Chronicle of America, Jersey City, N. J. (G. C. A.), \$1.00 year; single copy, 10c.

Garden Magazine, Garden City, N (G. M.), \$1.00 year; single copy, 15c.

Gardening, Chlcago (Gard.), \$2.00 year; single copy, 10c.

Gartenkunst, dle, Frankfurt. Germa (German), G. K., \$4.00 year; 50c copy. Germany

Good Roads Magazine, New York (G. M.), \$1.00 year; single copy. 10c.
Horticulture, Boston (Hort.), \$1.00 year;

single copy. 5c.
House Beautiful (H. B.), Chicago; \$3.00

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House and Garden, Fhiladelphia (H. G.), \$5.00 year; 50c copy.
Independent, The, New York (Ind.), \$3.00 year; 25c copy.
Landscape Architecture (L. A.), Harrisburg, Pa.; \$2.00 year; 50c copy.
Meehan's Garden Bulletin, Germantown, Philadelphia (M. G. B.) 50c year; 5c copy.

Meenan.
town. Philadelphia (M. G. D.)
5c copy.
Minnesota Horticulturist, Minneapolis
(M. H.), \$1.00 year; single copy, 10c.
Moeller's Deutsche Gaertner-Zeitung,
Germany, (German), M. D. G.

Moeller's Deutsche Gaertner-Zeitung, Erfurt, Germany, (German), M. D. G., \$3.00 year; 10c copv. Municipal Engineering, Indianapolis, Ind. (M. E.), \$3 00 year; single copy, 25c. Municipal Journal and Engineer, New York (M. J. E.), \$3.00 year; single copy,

Monumental News, Chicago (M. N.), Monumental News, Chicago (M. N.), \$1.00 year; single copy, 10c. National Nurseryman, Rochester, N. Y. (N. N.), \$1.00 year; single copy, 10c. Pacific Municipalities, San Francisco (P. M.), \$1.00 year; 10c copy. Revue Horticole, Paris (Rev. Hort.), French, \$4.50 year; 50c copy. Scientific American, New York (Sci. Am.), \$3.00 year; 10c copy. Suburban Life, New York (S. L.), \$3.00 year; 52c copy.

year; 25c copy. Survey, New York (Sur.), \$2.00 year;

10c copy. Woodland and Roadside, Boston (W. R.), 50c year; single copy, 10c.

Gardens and Landscape Gardening.

City Plan, Putting it into action, by John Nolen. Am. C. 5:332-4. Dec., 1911.

Estate, Completed in Seven Months with the aid of a greenhouse. G. C. A. 14:44-5, Dec., 1911.

Herbaceous Border, Two Useful Tenants of, by Richard Rothe. Illust. Hort. 14:793-4, Dec. 9, 1911.

Transformation of the Old City Walls of Strade by Gustav. Brandes. Illust. G. K. 13:213-20, December, 1911 (German).

Parks, Cemeteries and Public Grounds

Competitive Designs for an Encircling Illust. M. D. G. (German) 26:601-8.

Grand Forks Park System, by L. C. Morton. Illust. Am. C. 5:336-7. Dec., 1911.

Health Parks of Homburg and Nauheim by Reinhold Hoemann. Illust. G. K. (German) 13:220-3. Dec., 1911.

Good Roads Congress and Annual Convention of American Road Builders Association. G. R. M. 42:275-345. Illust. Dec., 1911.

Insects under Glass, Destroying. Hort. 14:802. Dec. 9, 1911.

Playground Plan, Comprehensive, Need of, by Henry S. Curtis. Am. C. 5:338-40. Dec., 1911.

Trees, Shrubs and Plants

American Bulbs, by E. S. Thompson. Hort. 14:933. December 30, 1911.

Evergreens, Broad-Leaved in New England. A. F. 39:1028-9. Dec. 2, 1911. Evergreens for the Dryer Sections of Minnesota. By Peter Siverts. Il-

lust. M. H. 40:18-21. Jan., 1912. Phlox, the Smooth or Meadow, by Willard N. Clute. A. B. 17:97-8. Nov.,

Roses, Rambling, Pruning of. G. C. A. 14:45. Dec., 1911.

Rose, the Up-to-Date; a Symposium. Illust. F. E. 32:1188-1213. Dec. 16, 1911.

Roses, Outdoor, by W. C. Barry. Illust. F. E. 32:1200-1204. Dec. 16,

Roses Outdoor, Culture and Use of, by William Tricker. Illust. F. E. 32: 1204-6. Dec. 16, 1911.

Roses, Insects Injurious to, by F. H. Chittenden. Illust. F. E. 32:1212. Dec. 16, 1911.

Roses, Fungous Diseases of, by Flora

W. Patterson. F. E. 32:1212-13. Dec. 16, 1911.

Wild Flowers, a Plea for, by D. Lange. Illust. M. H. 40:23-29. Jan., 1912.

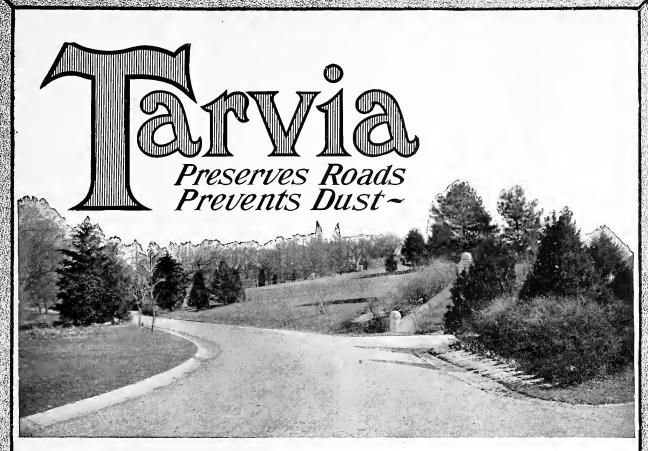
Winter Flowering Shrubs, New, by Arthur E. Thatcher. Hort. 14:799. Dec. 9, 1911.

Books, Reports, Etc., Received

One of the finest of the elaborate city plan reports that has yet been issued is "Better Binghamton," prepared by Charles Mulford Robinson for Binghamton, N. Y., and issued by the Mercantile-Press Club of that city. It is a profusely illustrated, handsomely printed, permanently bound book of 200 pages that makes suggestive recommendations for the betterment of Binghamton in every phase of its civic life. In many particulars the work presented unusual features, and a careful study of this report is highly interesting and instructive. The Mercantile-Press Club engaged Mr. Robinson at its own expense, and is now distributing the city plan in its attractive form which contains a supplementary section devoted to the various phases of life in Binghamton as the city is today. The book is furnished at less than cost, \$1.25 postpaid, and is well worth it to anyone interested in city planning. Already much interest has been manifested, copies having been sold to many of the larger colleges and universities and public and state libraries. Inquiries and orders, for the book should be sent to the secretary, Mercantile-Press club, Binghamton, N. Y.

From the U.S. Department of Agriculture: "Forestry in Nature Study," by E. R. Jackson; Farmers' Bulletin 468; The Dying of Pine in the Southern States, Farmers' Bulletin No. 476; Grape Propagation, Pruning and Training, Farmers' Bulletin No. 471; The Identification of Important North American Oak Woods, Bulletin 102 of the Forest Service; American Medicinal Leaves and Herbs, Bulletin 219 of the Bureau of Plant Industry; Modification of the Sulphonation Test for Creosote, Circular 191 of the Forest Service.

Doubleday, Page & Co., Garden City, N. Y., have just issued their Garden and Farm Almanac for 1912, a compendium of a vast quantity of information for anybody who uses the soil. The 1912 issue is bigger, better and larger than ever. Owners of farms, gardens and country places, or city folks interested in them, have generally found this almanac admirably fitted to their needs. All the features on which this approval has been based, and several new ones, all interestingly pre-



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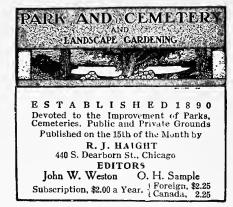
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sented and handily classified, appear in the 1912 issue.

Michigan Agricultural College, Agricultural College, Mich., bulletin 265 on "Fertilizer Analyses," and "How Contact Insecticides Kill," Technical Bulletin No. 11.

From Ottumwa Cemetery, Ottumwa, Ia., 1912 calendar with picture of office and chapel mounted on it.

OBITUARY

Edouard André, editor-in-chief of the "Revue Horticole," of Paris, France, and one of the most noted horticulturists of his day and generation, died at La Croix (Indre-et-Loire), France, Oct. 25, 1911, after a long illness, at the age of 71 years. He was the son of a horticulturist, and was born at Bourges, July 17, 1840. He early evinced a love for the work and in 1860 become head gardner of the city of Paris, a position he held for eight years. In a public competition for a large park for Liverpool, England, Mr. André carried off the prize and secured the commission, completing it in 1871. His work after this became international, and he was engaged in many cities of Europe and abroad in park development. From an immense amount of material he had gathered and assimilated he published, in 1879, "The Art of Gardens," a monumental and comprehensive work

Mr. John M. Stratton, superintendent of Mt. Peace Cemetery, Philadelphia, Pa., died suddenly on November 14, in his 63rd year. He suffered a stroke of paralysis while hunting, and died five hours later. He was interred at Clarksboro, N. J. He was recently elected a member of the American Association of Cemetery Superintendents, and his sudden death is keenly regretted.

We also regret to have to record the death of Mr. Davis Casselberry, superintendent of Odd Fellows' Cemetery, Philadelphia, a new member of the Association of American Cemetery Superintendents, which occurred last month.

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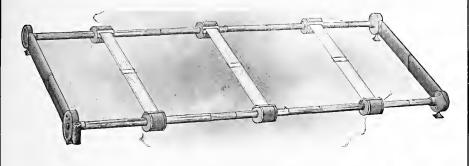
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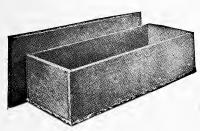
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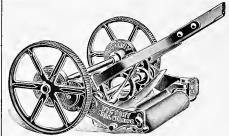
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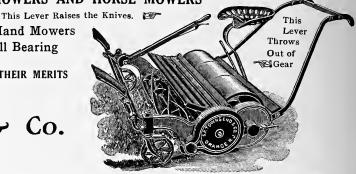
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Mrs. Diana Davies Perrin, wife of John Perrin, superintendent of Woodlawn Cemetery, Toledo, O., passed away at the family residence at 6 a. m., December 18, 1911. In the death of Mrs. Perrin the community lost a beautiful character and her family suffered an unconsolable bereavement, a long illness borne with a sweet patience, emphasizing the sorrow. She was born in Wales, in 1846, came to this country in 1873, and was married to Mr. Perrin the same year. She leaves a husband, son, two daughters and two grandchildren, with two brothers and a sister abroad.

PUBLISHERS NOTES

In addition to a handsomely gotten out brochure entitled "American Parks and their Construction," the American Park Builders, Inc., Chicago, of which Mr. Myron H. West, late superintendent of Lincoln Park, is president, has issued a circular letter to landscape architects advising of the organization of the company and its purposes. It is mainly a construction company, which while maintaining a landscape architectural department, purposes in preference to undertake the actual work of park and landscape construction. The company is prepared to submit propositions for carrying out such work under contract and bonds as circumstances prescribe. Mr. West recently lectured at Lincoln, Neb., on the subject of Parks and Playgrounds, as the subject particularly related to the development and making of a city beautiful of Lincoln.

A noticeable feature in the obituary advertising page of the New York Herald is the association idea. Following the death notices is an "In Memoriam" department, which is again followed by Cemetery, Crematory, Undertaking, and Florists advertisements. Immediately after this are the regular Church Notices. This is quite a reasonable and very convenient arrangement for those needing to refer for information.

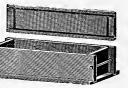


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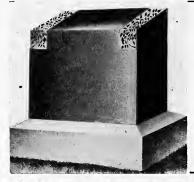
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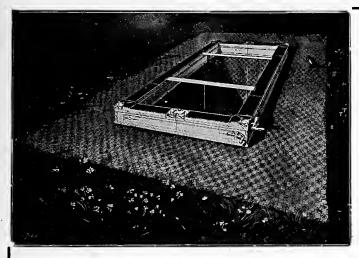
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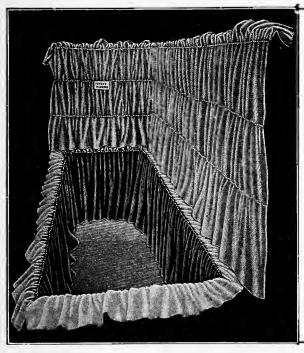
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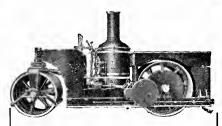
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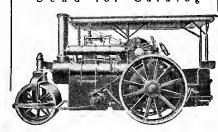
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PERSONAL

At a recent meeting of the Tenafly, N. J., Borough Club, at which the subject of parks and playgrounds had the right of way, Frederick W. Kelsey, of Orange, a former member of the Essex County Park Board, made an excellent address on the subject, detailing his own broad experience in park matters as a guide to those of Tenafly, who were embarking in the establishment of an upto-date park system.

The Board of Park Commissioners of Louisville, Ky., recently abolished the offices of superintendent in Cherokee, Iroquois and Shawnee Parks, and appointed Ernest Kettig, general superintendent of the Louisville Park System, at a salary of \$1,800 a year and a house in Shawnee Park.

Edward A. Merriam has been appointed superintendent of Forest Hills Cemetery, Chattanooga, Tenn.

We have received from Mr. A. R. Mengers, secretary Hanover Cemetery Association, Hanover, Kansas, a photo and notes on what has been accomplished to improve their grounds the past season. At the corner where once was a rock quarry, formal flower beds have been arranged, the water supply coming from a tank on the hill. This spot had been allowed to grow up to weeds, being unfit for burial purposes. Directors were elected who had the improvement of the cemetery at heart and a start has been made. More trees and shrubbery are greatly needed over the grounds which is work for the future.

ASSOCIATION DIRECTORY

American Association of Park Supts. President, W. H. Dunn, Kansas City, Mo. Secretary-Treasurer, F. L. Mulford, Dept. of Agriculture, Washington, D. C.

Association of American Cemetery Supts. President, John J. Stephens, Supt. Green-Lawn Cemetery, Columbus, O. Secretary-Treasurer, Bellett Lawson, Jr., Supt. Elmwood Cemetery, River Grove, Ill.

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President, Patrick Foy, Norfolk & Western Ry., Roanoke, Va.
Secretary-Treasurer, J. S. Butterfield, Mo.
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American Civic Association.

President, J. Horace McFarland, Harrisburg, Pa.

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CEMETERY NOTES

Continued from page 766

mences to present a more attractive appearance. There are a number of stones, however, that should be fixed.

Another big reclamation plan for the West End swamp area, New Orleans, La., is pending. The Metairie Cemetery Association has a big tract, extending two miles along the New Basin Canal, and back nearly a quarter of a mile towards the Seventeenth Street Canal, which it proposes to drain and reclaim and beautify, similar to the last annex which it improved. The Association is asking the city to protect the strip from the tidewater from Lake Pontchartrain.

CEMETERY IMPROVEMENTS

Before dissolution the late Council of Painesville, O., purchased the Blackmore place on the east side of an addition to Evergreen Cemetery. The property was bought for \$2,800, and there had been a prospect of some litigation over the deal.

The cornerstone of the new mortuary chapel and crematory at Forest Lawn Cemetery, Omaha, Nebr., was laid with Masonic rites and ceremony on Dec. 27, and with quite a number participating. The cold weather, however, had its effect. The new building, from designs by John McDonald, architect, which will not be completed for about

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Wanted—Correspondence from anyone in need of a Park or Cemetery superintendent. Am a professional Landscape Architect and can supply A. No. 1 recommendations. Have had thorough experience in Park and Cemetery work. Theoretically and Practically up to date. Address Box 99, care of Park and Cemetery.

Situation Wanted—By a first-class, energetic man, as Cemetery Supt.; 15 years' experience in all of its branches. Address "Superintend," care of Park and Cemetery.

Situation Wanted—By competent cemetery superintendent. Would accept place as assistant in large cemetery. Strictly temperate. Satisfactory references. Employed at present but desire change of climate. Address Box 123, care of Park and Cemetery.

Situation Wanted—By a young man with Technical School and three years' experience in Park and Boulevard construction under prominent Landscape Architect. Good draftsman. Wish to place my services. First-class references. M. F. Tillitson, Yorkville, Ill.

Situation Wanted—By competent and energetic man as superintendent of Park or Cemetery. Am up-to-date landscape architect and horticulturist. Best references. Address "E. P.," care of Park ences. Addres and Cemetery.

Wanted—Gardener familiar with plants and conditions in Florida to take charge of planting work on large proposition on West Coast of Florida. State age, experience and salary expected. Address 910 Fidelity Building, Portland, Maine.

Wanted—Position as Park or Cemetery Superintendent wanted by theoretical and practical well experienced Landscape Architect of ability. Long connected with leading cemetery. Moderate salary. Address Box 4, Park and Cemetery.

a year, will be a cut stone structure of St. Cloud granite and is of Grecian architecture. It is 65 ft. by 40 ft. in area, and will cost about \$100,000. It is proposed later to erect a Columbarium in connection with it. The oil fed crematory furnace is in the basement and is built into the foundation walls. Forest Lawn is twenty-five years old: it comprises 320 acres but only about twenty-five acres have been sold, and James Y. Craig has been its superintendent since June 1, 1886. The burials up to December 1 number 13,243. Over \$1,000,000 have been spent in improvements and for memorials. The officers of the board of trustees are O. C. Campbell, president; M. H. Bliss, vice-president; H. S. Mann, secretary and treasurer.

The new addition to the Muscatine,

Ia., city cemetery, known as the Page addition, situated on the brow of the hill almost directly back of the Memorial chapel, has been accepted by the city council. The new plot contains over 300 lots and is one of the most beautiful spots in the entire place. A new scale of prices is to be used for lots in this addition.

TRADE PUBLICATIONS

Twentieth Century Fruits; illustrated booklet on new fruits from the Luther Burbany experimental farms at Santa

"New Creations in Dahlias," catalog of Peacock Dahlia Farms, Williamstown Junction, N. J.

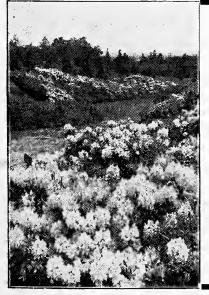
"Everything for the Garden," 1912 catalog of Peter Henderson, New York.



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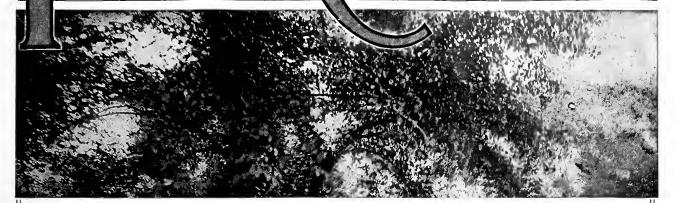
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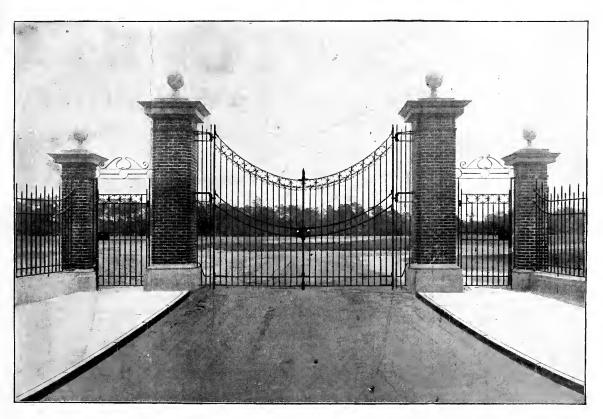
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Vol. XXI., No. 12

FEBRUARY, 1912





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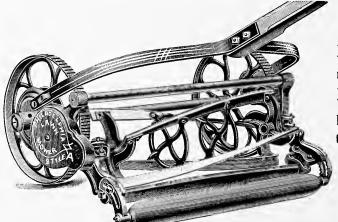
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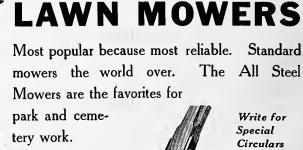
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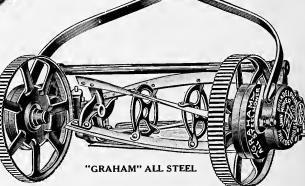
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Prot. White of the Massachusetts Agricultural College Gives the Following Endorsement of L. & B. Houses

Company constructed a range of greenhouses for the Massachusetts Agricultural College. This range consisted of a carnation, rose, tomato, cucumber, violet and general house, each 50 ft. by 26 ft. These were connected by an alley house 128 ft. by 12 ft. A palm house 40 ft. by 28 ft. was also built at the same time. The palm, general and violet houses were of the Lord & Burn ham sectional iron frame construction; the other houses were of their Pipe Frame type. These houses are used largely for instructing purposes and have proven very satisfactory in every particular. A careful record of the



E. A. WHITE Professor of Floriculture yearly production of carnations and roses has been kept and the results show an excellent yield per square foot of bench area. The range is annually visited by a large number of practical growers and the general comment has been that the range is 'fine in every respect and that the college got a great deal for the amount of money spent.'"

E. a. White.

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class of stock used.

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PARK AND CEMETERY

AND LANDSCAPE GARDENING.

Vol. XXI

Chicago, February, 1912

No. 12

Park Efficiency

There is positively not another city in the country that presents such an anomaly, even in a minor degree, as Chicago with its ten separate park boards, and in connection with this the Bureau of Public Efficiency has just issued a valuable report showing how, in municipal administration, economy and efficiency may be realized. It urges unification of these systems and consolidation with the city government. Among its reasons for the suggested change are: possible saving of \$500,000 yearly in operating and maintaining public parks; possible extension of public park system to meet, properly, demands and needs of the community not properly met under present arrangement; reduction to minimum of inefficiency of management and of money waste; more equitable distribution of park revenues and benefits over whole city. The charter reform which was strongly advocated in 1905 would have brought about the consolidation, but machine politics and the public leeches prevented this very desirable consummation. It is devoutly to be wished that the report may help to bring about more successful results in the efforts to get rid of such an absurdity in city government.

A Prime Object of Horticultural Societies

The primary object of horticultural societies in which other than professionals are admitted to membership, should be to create a love for flowers, and, so far as possible, instruct its members and the public in their culture. The logical time to do the very best work of this kind is in the spring, when, in the very nature of things the garden lover is casting about for new ideas, and young and old are in the mood for planting things. Acting on this idea the Horticulture Society of Chicago will hold its first spring exhibition on March 11-17th, 1912. Another departure from its usual custom will be in the place of holding the show. This year the Art Institute has been selected and the main exhibit will probably be placed in Blackstone Hall. In this beautiful palace of art the flowers will have an opportunity to perform a two-fold purpose: first, to tell the story of their own beauty; and, secondly, by their artistic arrangement they may be made to convey some idea of their relation to sculpture in gardens, home grounds, etc. The opportunity for such a really artistic display of flowers, shrubbery, etc., has never been afforded the Society and much real benefit should be the result. The great success of the Boston Spring flower show last year prompts an earnest appeal to the membership of the Chicago Society to spare no efforts or pains to make its spring exhibition a worthy type of floral displays.

The Lincoln Memorial—Niagara Falls

The American Civic Association has considerable work on its hands watching and working to conserve the public's interest, and especially at this time in connection with the preservation of Niagara Falls, in which it has been actively engaged for the past few years, and more recently in its efforts to prevent the absurd substitution of a public road, at a vast cost, for a great public monument in memory of Lincoln in the city in which his great genius and character were more potently exercised. As a national possession of world-wide and inestimable value, the grand cataract of Niagara should be preserved and it is naturally a possession which should be deeded forever to its owners, the people

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without a question of doubt. In this, as well as in the matter of the Lincoln Memorial at Washington, of which, by the way, a tentative design is given in another column, it is really incumbent upon our readers who may be interested in these great questions to communicate with their representatives at Washington without delay asking them to vote for the Monumental Memorial to Lincoln in Washington and for the preservation of Niagara Falls against the rapacious power companies. Illinois is, of course, particularly interested in the memorial to its great citizen, Abraham Lincoln, and Mr. E. J. Parker of Quincy, Ill., of national reputation for his activity in civic development, is doing yeoman service in the cause of this memorial as against a road scheme. In spite of the remarkably alluring arguments offered by the highway advocates, there seems to be no ground whatever for the assumption that a public road, of no matter what importance as to route, length or convenience, can teach the lesson's that memorial sculpture or a purely artistic monumental structure can impart for concentrating thought upon the life and work of such a man as Abraham Lincoln, our great martyr president.

Disreputable Street Conditions

It is anything but creditable to the City of New York that views of its streets and parks are seldom, if ever, used to illustrate conditions which should prevail in well regulated cities. Almost invariably when discussing or lecturing upon the subject, European cities, like Berlin and Paris, are called upon to show what city streets, shade trees, street advertising, etc., should be. It is quite true that there are many handsome buildings, both public and private, and some fine streets and drives in the metropolis; but photographs of any of its principal thoroughfares usually show either a pile of garbage or ashes, or a billboard carrying signs utterly at variance with the dignity of such a city. Then again the streets of New York are almost continually torn up, or there are piles of bricks, stone or lumber in evidence to mar what otherwise might be an attractive view. In spite of the fact that these criticisms may be freely applied to other large cities of the country, nevertheless, it is high time that New York's authorities, and wealthy citizens, awakened to the fact that it is time to call a halt to the rank commercialism which has frustrated many an opportunity for aesthetic development in the great city's streets and buildings.

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Swatting the Fly

It is evident from the report of the proceedings of the recent convention of the American Civic Association, that the "Swat the Fly" movement is to be by no means an unimportant part of the work of civic improvement during the coming year. The term "Swat the Fly," expressive, if not elegant, is said to have originated in the west: it does not necessarily mean that flies are to be destroyed by crushing or trapping, but by any method which may be adopted for their extermination -a consummation most devoutly to be wished. President Taft said, in speaking of National Parks, that the Department of the Interior is the lumber room for anything which cannot be definitely located in any other place, and if that is so, that department may yet have to take up the "fly question," for no one can seem to decide just where it belongs. It seems to be related to the Health, the Agricultural, Entomological and various other "departments"; but perhaps after all, it is most appropriately considered by Civic Improvement Societies.



BUILDING NEW JERSEY COUNTY PARK SYSTEM

The Hudson County, N. J., park system, including several New Jersey townships opposite New York City, is doubly interesting as an example of scientific development of a system of county parks and as an example of park building in an area that is probably the densest in population of any similar tract in the country.

The second annual report of the commission records that the work since the last report has covered a greatly extended field in the establishment of the system of county parks provided for by the law which created this commission and gave definition to its duties.

The commissioners deemed it best to proceed with park development so as not unreasonably to burden tax-payers, and while, up to date, this commission was entitled to total appropriations of \$4,679,308, it has asked for only \$2,940,000.

When the commission took up the work of providing the county with a system of parks, it had nothing upon which to proceed, but the task planned is now practically in hand. The work of the commission in future, with its present appropriations, will be largely the development of the sites already located.

Six park sites, aggregating an area of 517.9 acres, have been selected and most of the land purchased. The plans of the commission further provide for the extension of the present park system upon the appropriation of additional funds from time to One park-West Side-has been completed as to its upland portion and thrown open to the public; the playground at Hoboken Park has been a source of enjoyment and education to tens of thousands of children, and the open-air skating-rink has been largely used and appreciated. Work is progressing rapidly on the construction of West Hudson and Hoboken parks.

The desire to locate parks throughout the county so as to benefit all parts has been foremost in the plan of the Commission. Park sites have been secured with a view not only to provide ample facilities for the recreation of the people, but also to provide forms of recreation in each park which are not common to the other parks.

During the year 1910 two park sites have been selected in Bayonne, and a large part of the property has been purchased; work of construction has been prosecuted in West Hudson and Hoboken; pathways have been constructed from the Boulevard Loop to the Hudson River, in North Hudson. Plans have been accepted and work is under way for the completion of the park in Hoboken, and permanent buildings of attractive design are now in process of construction.

As was stated in the first report, which was discussed in Park and Cemetery, the value of land for a general park system in Hudson County reaches the highest average cost heretofore made necessary in any American community, for available space cannot be purchased for less than an average of \$3,500 per acre. This fact is brought strikingly to attention by the Metropolitan Park Commission of Providence Plantations, which says, in its sixth annual report to the General Assembly of Rhode Island:

"Among other park districts of the United States, the one which most closely corresponds to our own in tax valuation and population is that of Hudson County, New Jersey, comprising Jersey City and its adjacent towns. Hudson County, however, has now to pay the penalty of pro-



SHELTER HOUSE IN HUDSON COUNTY PARK.

crastination, for it waited until all of its available natural opportunities were gone before making a beginning of its park system, and now discovers, to quote the report of its Commission, 'that available space cannot be purchased in this district for less than an average of \$3,500 per acre.' Consequently, the two million dollars that Hudson County had appropriated up to April 1, 1908, for beginning its work, will not buy as many acres as this Commission has already secured for \$125,000. We may observe, also, that Hudson County's appropriation, applied to our own district, would secure land for all of the projects needed for the complete system."

This comparison is an especially striking one, when it is considered that the Metropolitan Park Commission of Providence, Rhode Island, does not possess the power of eminent domain, while much of the land in Hudson County was acquired by condemnation proceedings.

The average price paid for the land in the two parks—West Side and Hoboken—for which land purchases are completed amounts to \$4,005.85 an acre, and the indications are that when the land for the other four parks is all purchased this average will be reduced to about \$3,500.

The West Side Park is today a most popular recreation spot is evidenced by the fact that during the fiscal year ending November 30, 1910, it was patronized by an unusually large number of people, the estimated attendance being 334,000 on foot, 47,200 by automobiles, carriages and bicycles, 1,500 equestrians, and 147,700 on the athletic fields and playgrounds, making a total of 530,000 visitors.

The band stand in West Side Park, adjoining the Administration Building and fronting on the concourse leading from Upland Drive is octagonal in shape and is built with molded base course, steps of hard bluestone, Indiana limestone columns, and surmounted by a roof of red Spanish

roofing tile. It is, as a whole, of a permanent character, and of a type of architecture specially suited for park structures. It has a diameter of 31 feet 5 inches, height from ground to roof of 15 feet 10 inches, and a total height to the summit of the roof of 24 feet. The cost of construction of this building by contract was \$4,700.

It is the intention of the Commission, where possible, to construct all of its buildings of this permanent character, as they are one of the most attractive features of the park, and being of sufficient strength and durability to withstand the elements, they lend to the park an attractive and finished appearance.

The Outlook pavilion differs somewhat from the band-stand in being circular, with roof supported by columns. This pavilion is placed at the summit of Outlook Hill, at the northerly part of the park, approached by a series of steps, affording an outlook over the entire park, and an excellent view of the baseball and football fields, the cricket-crease, and the wading-pool. It has become most popular as a place of shelter, and is daily thronged by mothers and children. This structure is also of permanent construction, with concrete foundations and floor, bluestone steps and platform, Indiana limestone columns, base, and capitals, and unglazed Spanish tile roof. The interior is fitted with a wooden seat, surrounding a pedestal on which stands a large vase, a reproduction of an ancient specimen in the Metropolitan Museum of Art. The cost of the construction of the pavilion by contract was \$4,898.

The construction of the entrances to West Side Park at the foot of Olean Avenue involved the construction of about 310 feet of path, varying in width from 8 to 14 feet, the greatest width being at the entrance. The sidewalks in the immediate vicinity were improved and provided with proper curbs, and simple brick entrance-posts on stone bases and with proper stone caps were provided.

After the appointment of Charles N. Lowrie as landscape architect to fill the vacancy caused by the death of Daniel W. Langton, the plan for the improvement of West Hudson Park submitted by Mr. Langton was taken up for reconsideration, and at the request of the Commission, the architect submitted a plan making several changes therein, notable among which was the location of the

main driveway, placing it farther to the south, so as to provide increased areas for playground and athletic purposes, and the extension of the lake system to almost twice the area originally planned. The following is from Mr. Lowrie's description of this general plan:

"The natural advantages of the West Hud-

attractive landscape features, where great numbers of the surrounding population, as well as those from a distance who may find it possible to visit the park, may be provided with rest and recreation of a kind likely to be best adapted to their needs.

"The shape of the tract selected being long and narrow, the park requires reasonably direct means of communication between its different parts in the direction of its length. The driveway and the main pathway, which are designed to perform the same function as an axis in a formal





APPROACH TO WEST SIDE PARK, BEFORE AND AFTER IMPROVEMENT; HUDSON COUNTY, N. J. PARK SYSTEM.

son park tract are numerous; amongst them may be mentioned the fine rolling surfaces, the tract of high woodland at the westerly end, and the group of little ponds at the easterly, while throughout the intervening area the ground is fertile and well adapted to the creation of lawns and wooded groves. The woodland is open to the prevailing breezes, and well covered with young oaks and other hardwood. The hilltops furnish excellent vantage points for a great variety of interesting outlooks over the park. The ponds may be linked together into a lake with picturesque shore lines. The rolling valleys, with ridges intervening, provide sites for play areas of many kinds.

"In a general way, the object sought in developing the design of West Hudson park has been the furnishing of a park of quiet,

scheme, are therefore located as the plan indicates.

"Thoughout the whole park, while the practical question of use has been the first consideration, careful attention has been given to the consideration of beauty as well. The design provides a self-contained land-scape, secured by the placing of border plantations of trees and shrubs along all boundaries. The interior scenery thus obtained is embellished with wooded groves on the hills and open grassy lawns in the valleys, which arrangement agrees with the intended uses of these respective areas.

North Hudson Park comprises 160.6 acres and is a high rolling tract of land, well wooded in part, but large-

ly composed of open fields and a large swamp, with here and there a quarry-pit overgrown with bushes. The land lies compactly as to shape, and is conveniently reached from every direction by vehicle or afoot. The surface slope in the region lying between the Hudson County Boulevard and the Hudson River is exceedingly rocky and steep, almost precipitous-a typical palisade formation. As to the distinctive features of this tract by which it may be made to supplement the other parks, in none of them is there an opportunity for an inclosed landscape scene so broad and spacious. From none are there such fine views, here reaching up and down the Hudson for miles, and across to Riverside Park, in New York City. These, with the immediate outlook of river activities, present a panorama unique not only in public lands in Hudson County, but also in the whole range of American park scenery. ..

From the organization of the Commission in 1903 there was a constant appeal from the citizens of the southern part of the county for the location of a park in South Hudson. The city of Bayonne, at the southern end of the county, with a population of 55,545, is growing and developing so rapidly that the Commission was unanimous in the opinion that a park therein was an absolute necessity to a complete park system.

Within its boundaries, this park comprises an area of 88.349 acres to the exterior line for solid filling, and 59.199 acres to high water line, or actual land area.

The central feature of Hoboken park consists of a building intended as a field-house or social center, combined with a semi-detached bandstand, with a music court surrounding it. This field-house is so arranged that it may be an open pavilion on the first floor in summer, furnishing shelter and shade, and possible provision for refreshment-

booths, a park office, etc., and in the basement a storage-room for tools and equipment. In winter this field-house may be converted into an attractive and comfortable hall, suitable for lectures and any social neighborhood gatherings, by means of removable sash and windows. Adjoining this

sufficiently near the bandstand to be available as a place from which the music may be enjoyed.

The total expenditures for the year's work covered by the last report was \$355,906. The offices are at Jersey City.

Following are the officers of the



THE OUTLOOK, WEST SIDE PARK, AND THE SITE OF THE STRUCTURE BEFORE IMPROVEMENT.

pool or lagoon is provided, again on a lower level with surrounding paths and flower-borders, and also with parallel paths on the same general level as the other park paths. These two parallel paths are, in fact, a branching out and continuation of the central path. All of this region is

field-house to the east, an ornamental Hudson County Park Commission: President, William J. Davis; vicepresident, Palmer Campbell; treasurer, John W. Hardenbergh; assistant treasurer, Elbert Rappleye; secretary, Walter G. Muirheid; counsel, Frank H. Hall; landscape architect and acting superintendent, Charles N. Low-

PROGRESSIVE IN SPOKANE PARK WORK

Few cities in the last decade have shown the rapid growth of Spokane and being naturally located in a picturesque valley surrounded by mountain peaks her citizens have given little consideration to the city's future park system.

Some four years ago a park commission was created which came into control of what parks the city already owned and were expected to

soon formulate and carry out plans for a park system in keeping with and needed by a city of 100,000 inhabitants. The park commission found that not only had they been given control of the parks but that they had to meet a handsome debt created by the former park officials, and which wiped out the lion's share of a \$100,000 bond issue which the city government voted them as a

nucleus to commence operations on.

Starting out in the right direction the park commission secured the scrvices of J. C. Olmsted, of Brookline, Mass., who laid out an extensive scheme for a park system which is likely to be eventually carried out,

The Park Board went before the public and asked for a million dollar bond issue so that operations might be started in earnest. This issue was voted by the people although by only a few votes over the three-fifths majority required by law. It was soon proven however, that it takes time to carry out the wishes of the well meaning citizens for a clique of politicians who could not control the expenditure of this money under the guise of a disgruntled contractor contested the legality of the bond issue and after dragging for a year and a half the Supreme court gave the decision, as had the lower court, that the bond issue was valid.

The bonds were sold, on December 23, and this money along with the annual appropriation for maintenance (1 mill of the tax levy) this year about \$90,000 gives the Park commission ample funds for the acquirement of new sites and starting improvements on the parks already under their control, Among the improvements which have already been

started by Park Superintendent John W. Duncan, that will be carried on this year are the establishment of 'a working headquarters at Manito Park which Park will in time be a regular arboretum.

Here also will be located the city greenhouses, the building of which has already been begun. Lord and Burnham Co. iron frame construction will be used. These greenhouses are built on a terrace overlooking a flower garden and beyond will be a rose garden both of which will be laid out this spring. An extensive nursery has already been established in this Park and every variety of trees shrubs that will prove hardy, will be grown. Last year by discreet management about \$30,000 was squeezed from the Maintenance fund for improvements chief among which were the grading and planting of Havs Park, a twelve acre neighborhood Park which had received no attention and was simply wild prairie land, the grading and planting of about fifteen acres of Audubon Park and the grading and planting of half of Adams Park.

Adams Park will now be completed and Liberty Park will have much work done in the way of planting the National slopes to the lake. Corbin Park will be remodeled and many thousands of shrubs used.

All of these improvements are among small or neighborhood Parks but the Down River Park is likely to be the first large Park where extensive work will be done. Here a system of drives is being planned extending along the river bank for several miles and the work of sub-grading has already begun.

Among the much needed improvement will be shelter and sanitary buildings at Hays Park, Corbin Park and Adams Park.

PLANNING A GREAT CITY PARK FOR SACRAMENTO

One of the most interesting of recent park works on the Coast is embodied in the preliminary plan and report for Del Paso Park, Sacramento, Cal., recently prepared by John Nolen, the landscape architect of Cambridge, Mass. Del Paso Park is an unusual park undertaking for a city as small as Sacramento and is also typical of the way such work is being taken up on the Pacific Coast.

The following description of the plan from Mr. Nolen's report, gives a good idea of the scope and nature of the work.

It is of fundamental importance that the purpose or purposes for which a park is intended should be clearly defined in advance. In the case of Del Paso Park, the property is so large that it ought to serve a number of different purposes and yet in order to do this successfully, the park must be designed so that the fulfillment of one purpose will not conflict with another. Del Paso Park should provide a beautiful system of drives, riding paths, and footwalks, fields for games such as golf, tennis, and base ball; bathing facilities. It should include a great formal or flower garden that would give opportunity for the appropriate planting and development of the rich vegetation that thrives under irrigation in California. In connection with this formal parkfor it would be a park in itself-there should be suitable gathering places for the people, possibly in a building corresponding to the open air Greek theatre at the University of California, and also in a Music Grove like that, for

example, in Golden Gate Park, San Francisco. This formal garden would provide above all a beautiful promenade and the pleasure that comes from the perfect execution of formal design and from brilliant color. Another purpose should be the scientific and popular interest that is represented in Zoological Gardens and botanical collections. Above all, however, a large public park property such as Del Paso Park is, should include some broad landscape scenery, the kind of scenery that becomes less and less accessible with the growth of city populations and more and more in demand. Of course, these effects should not only be broad, but beautiful, including careful composition of woods, lakes, and other naturalistic features. These, then, were the main purposes that I had had in mind in working out the plan for the park,

The main features of Del Paso Park, as provided in the Preliminary Plan, are as follows:

- (1) The Formal or Flower Garden and Music Grove (including Greek Theatre, as a terminal feature) occupying about 80 acres.
- (2) The Zoological Garden and Botanical Garden, about 70 acres.
- (3) The Lake, which has a water area of about 60 acres.
- (4) The Woodland or Forest, which covers approximately 160 acres.
- (5) The Golf Course, which comprises about 30 acres.
 - (6) Recreation Field, about 20 acres.
 - (7) The Tennis Courts, 7 acres.
 - (8) Picnic Grounds.

- (9) Children's House and Children's Garden.
 - (10) Japanese Garden.
 - (11) Bowling Green.
 - (12) System of Drives and Walks.

In addition, there might be some minor features, such as Ostrich Farm, Cactus Gardens, and Casino and Museum buildings.

(1) Formal Garden: The design of this area can best be appreciated by reference to the plan. Please note its size. The effect that I wish to produce depends a good deal upon the scale and extent of this garden. It is nearly a mile long and at the centre 1,200 feet wide. The main central feature which is shown in cross section in the upper left hand corner of the plan would be 300 feet wide, and the Great Mall would provide space for eight rows of trees, probably palms, making four grand and impressive avenues. The sides of the garden would be framed in by vine-covered arbors or covered walks. There would be ample opportunity in this garden for the use of all of the tropical and sub-tropical plants and flowers that can be grown in California. The arrangement of the beds shown on the plan is intended only to be suggestive. It would have to be studied more in detail in later plans. This garden would also afford appropriate situations for large water basins, fountains, statuary, and other accessories of formal out-door art.

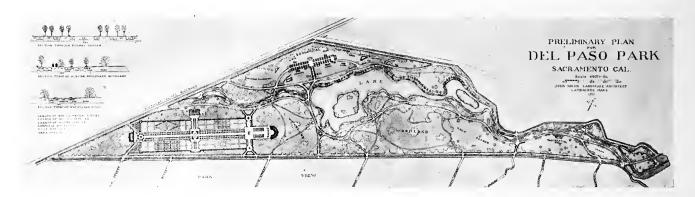
At the east end of the main formal avenue, would be the Music Grove (350 feet \times 650 feet), where seats would be furnished under trees, and beyond the

Music Grove, as the terminal architectural feature, the Greek Theatre already referred to. This theatre as planned would accommodate perhaps 15,000 people. Its size, however, could be adjusted according to requirements.

It may be well to add that the situation of the Formal Garden in the Del Paso Park property is very favorable present channel of Arcade Creek, which runs parallel to the north shore of the Lake. In order to save both rows of trees along this part of Arcade Creek, I recommend that a new line this side of the Creek be established as the north shore of the Lake. Another advantage of this method would be the opportunity to plant the entire lake shore harmoni-

Silver Fir, Sugar Pine, Willow Pine, and Big Cone Pine. These are only tentative suggestions. They would require more study and consideration later

The borders of these woodlands that touch on the Lake would have greater variety and include besides the Oaks possibly the Water Birch, the Western



for the execution of the proposed design, first because the ground here is practically level. There is a difference of only six feet from the west to the east end of the Formal Garden, and less than ten feet from the north to the south. Secondly, it is desirable to have this feature close to the entrance of the park, as a greeting.

(2) Zoological Gardens: The Zoological Gardens need little explanation. It has been demonstrated by experience that a collection of animals is an interesting feature to attract people to a park. It might be advisable, therefore, to make a beginning with the Zoological Gardens, early. The collection could be added to from time to time.

The Botanical Gardens, perhaps, could also be begun early for the same reason and it is possible that you might get the interest of some local or state scientific society and secure its co-operation. The State, itself, acting officially, might, for the sake of the education that a botanical collection would afford, be willing to assist in this connection.

(3) The Lake: The attractiveness of a body of water of considerable size is unquestioned. The Lake as planned, is more than a mile in length, with an exceedingly interesting and varied shore line, about three miles in length. With proper planning, this body of water with the vegetation that could easily be established on its banks, would become the central landscape interest of the park. The Islands would add to its beauty. The construction of the Lake would require considerable excavation and grading. Yet, the situation is a favorable one. The dirt taken from the area which the proposed lake is to occupy would be used first in filling the

ously. The balance of the dirt would be used to give a more undulating character to certain parts of the park, especially the broad area of woodland to the south of the Lake.

In addition to the beauty of the Lake as a landscape feature, it is big enough to afford considerable pleasure as a centre for boating and bathing.

The question of a permanent supply of water is one which the Committee will have to consider and decide. It seems to me reasonably certain that sooner or later an ample supply of water will be needed for this park and for the surrounding private property. The city and these property owners ought to co-operate. If they did, it would be possible to establish such a Lake as is here proposed, as a reservoir which would serve the requirements of irrigation. If the Committee should conclude that the Lake feature was not practicable, I could omit it in the final design. I hope, however, that it will not be necessary to omit the Lake, as the Del Paso Park property is at present rather dull and commonplace considered as a public park, and it needs this Lake as its main attraction.

(4) The Woodlands: The big woodland to the south and west of the Lake would occupy over 150 acres of ground. In time, it would become an important all-the-year-round pleasure resort. It seems to me now, that in planting the emphasis should be placed mainly upon a variety of Oaks, such as the Coast Live Oak and the Interior Live Oak, the California Black Oak, the Maul Oak, and the Tan Oak. Then there would be cone-bearing trees, probably such as the White Fir, the Red Fir, and the Douglas Fir, the Incense Cedar, the

Sycamore, Maples, and some Willows and Laurel. The same sort of planting would be carried along the Creek. The Woodland to the east of the Formal Garden and Greek Theatre and surrounding the Formal Garden on the other sides would probably be Eucalyptus and Acacia. The idea would be to plant these solid so as to establish a firm wall or background and separate effectively the Formal Garden from the informal features beyond. This is a point of importance, as otherwise there would be a conflict of the different artistic ideals which should dominate these different features.

- (5) Golf Course: The area set aside for the Golf Course does not call for much explanation. If necessary, it could be somewhat enlarged, or it could be omitted altogether and this territory treated as a part of the big woodland scheme. This is a question for the Committee to decide.
- (6) Recreation Field: The space set aside for the Recreation Field is ample and probably would not come into active use until the population of Sacramento had increased, especially in the neighborhood of Del Paso Park.
- (7) The Tennis Ground: This ground, like the Recreation Field, might not be much used for some time. It would be a good reserve, however, and might be useful at once for occasional popular public gatherings.
- (8) Children's House and Garden: This, in my opinion, is an essential feature and ought to be established at the start. Anyone who visits the Children's House and Garden and the Playground in Golden Gate Park appreciates the popularity of this feature. There would be some choice as to its best location

and it would depend somewhat upon the decision on other points. My judgment at present is that the area north of the Formal Garden would be the most convenient and suitable. Little children usually come with parents and they would naturally be interested in walking through the Formal Garden and going later over the Zoological Gardens and, perhaps, to the Picnic Grounds. Therefore, a Playground located as suggested would be easily reached. At the same time, the general area mentioned is sufficiently large to permit of heavy planting as a screen between the Formal Garden and the Children's Play-

(9) The Picnic Grounds: In all probability, there ought to be at least two picnic grounds, one at the west end and one at the east end. The approximate location of these has been indicated on the plan. They should have suitable planting and in the case of these grounds, I think a good lawn should be established and maintained. Of course, they should have tree shade and be furnished with drinking-water,

tables, and other picnic conveniences.

(10) Japanese Garden: A Japanese Tea Garden, such as one usually finds in parks in Californian cities, would be a feature of attraction. A suitable location could easily be decided upon. It seems to me it ought to be in the western end of the park, not too far from the Lake, the Formal Garden, and the Zoo. These popular features should be placed in convenient relation.

(11) The Bowling Green: The Bowling Green is a minor feature and yet it is beautiful in itself and an appropriate form of sport for inclusion in the park. I am not yet certain whether this had better be placed in the Tennis Grounds or nearer the Children's Playground and Formal Garden. It could readily be provided in either place.

(12) The System of Drives and Walks: In so large a park as Del Paso, the system providing circulation for vehicles and people is of greater importance, probably, than any other single thing. The provision outlined on the plan seems to me ample, although, of course, it could be extended. The plan

provides 15 miles of drives, 29 miles of walks, and about 12 miles of bridle paths. The principal drives and walks are those which run in general parallel to the Creek and the lake shores. There are good boundary roads also. Walks would be carried through the Woodland, especially to the more interesting elevated points affording outlooks. The widening which I have recommended for the Auburn Boulevard and for the Wheatland Road would, I believe, prove advantageous. As those roads are laid out at present, they would not be adequate to take care of the additional demands that will probably be made upon them in the future. A liberal provision for circulation around and through the park, as provided in the Preliminary Plan, is something which I should recommend the Committee to consider carefully. Here again, however, there would be no necessity to execute all of the recommended roads at once. Without disadvantage they could be taken up in some systematic way, constructing the most urgent at first and postponing the others until needed.

FIGHTING FALL CANKER WORMS IN THE PARKS

By Charles E. Keith, Superintendent of Parks, Bridgeport, Conn.

Editor Park and Cemetery:

I would like to tell you of an experience we have had during the years of 1910 and 1911 in fighting the Fall Canker Worm Anisopteryx Pometaria and express some conclusions I have come to, as to the use of poison in fighting these insect pests, which rarely kills the insect but often kills the blessed bird, the best guardian that stands between vegetable growth and the myriads of pests that prey upon it.

During May in 1910, I noticed many Canker Worms in a section of Beardsley Park where we were having some work done. They were abundant on nearly all kinds of shrubs and trees, denuding many of the Wild Cherries, Red Maples, Black Ash, Iron Wood, etc., of nearly all their foliage. On becoming full grown, we noted that they came down by their web and went into the ground. They reappeared in another form on the 21st of November. The females as wingless moths, preceding the males a little who were supplied with wings. The females crawl up a tree (or anything else) making 3 to 5 feet a day, resting in exposed places to be fertilized by the males who fly to her, after which she crawls at a faster gait up the tree to deposit her eggs.

It occurred to us that as they came onto the tree would be the best time to kill them. We selected a group of 25 trees of various kinds and sizes and killed all Imagos as long as they came up, which ceased Dec. 23.

During May of 1911 our group of trees were nearly free of worms, so much so, that we decided to continue the battle another season throughout the whole park, consisting of some 200 acres, containing some 10,000 natural indigenous and foreign trees.

The moths made their first appearance this year (1911) on Nov. 11. Selecting a Red Maple 14 inches in diameter I watched for and killed on each day all Imagos that came to it, not finding any after Dec. 20, and only stragglers after Nov. 29, making a total for my trees of 1,722 females and 34 males. There were killed on this park between the dates just mentioned aside from my tree 210,000 Imagos at an expense of \$80.00.

I take the liberty to quote from Prof. C. V. Riley's report of 1880 and 1882 where he states, that a number of impregnated female Canker Worms raised in confinement, laid an average of 240 eggs each. This number multiplied by 210,000, gives an excess of 50,000,000 possible worms that were destroyed at a cost of

\$80.00; and no harm done to the tree or the good cannibal and parasitic flies, insects or birds. Prof. Riley speaks of a parasite fly, the Microgaster and the Tachina, which destroys these worms in large quantities. He also speaks of a very minute specie of Platygaster which destroys the eggs, also the Nothrus that eats them. The Spotted Lady Bird which eats the young and the Fraternal Potter Wasp who stores large numbers of these worms in her cells as food for her young, nearly all of our birds are fond of, and eat immense quantities of these worms. The report also gives a list of 45 specie of Birds in Connecticut and Massachusetts that feed on the Canker Worm.

In years gone by much money has been spent to banish this worm. Many sticky substances have been used, numerous devices patented and unpatented were tried, traps of all kinds, and some quite expensive, were used. The boring of holes in their trees and plugging sulphur therein was practiced in many parts of the country and never killed a worm. Many farmers becoming so discouraged in fighting this pest cut down their orchards and burned them on the advice of the Editor of the New Eng-

land Farmer and other papers in the middle and northwestern states where the pest was prevalent.

There appeared in the August 7th, 1909, issue of the *Horticulture* printed in Boston, a statement that 24 dead Robins and 50 dead Sparrows had been found in a place which these birds usually frequented, soon after the trees in that locality had been sprayed with poison. This statement has never been denied or even questioned by the people who use poison or by anyone else.

If their poison mixture kills the birds, it will kill the precious little parasites that have always been such good friends to tree life.

If the above statement is true, it is time right now, for all people to

rise in their might and put a stop to the use of poisons or anything else that kills a bird. Without bird life I am afraid that vegetable life would soon be destroyed by insect life.

None of the people that use poison will claim that it will kill by contact. Then why use it if it kills the birds, when it is well known by all men that kerosene and whale oil soap will kill this pest by contact and not hurt the birds; but it may destroy the good parasites. So we advise where possible to follow our method and kill their progenitors at a very small cost, compared with any other method. I do not believe we have many spring Canker Worms *Paleacrita Vernata* in this section of the country, but will ascertain this coming spring.

I have heard agents while seeking work, claim that they could kill with their poison sprays the many kinds of Borers that work in the cambrium layers and inner bark. Lord bless them, they could not kill in a life time with poisons as many of these Borer as one of our Woodpecker kills each day. Who of us that do not remember seeing this little bird, particularly in the winter time hunting over our trees for these Borer, Scales, etc. We very seldom see one now and if the poisons thrown on our trees is one of the causes of reducing them to their present numbers, it should be sufficient reason to stop its further use, by laws which we trust will soon be enacted in all states where this pest does damage.

MEMORIAL ARCH FOR UNIVERSITY CAMPUS

The Class of 1890 of DePauw University, when preparing for its twentieth anniversary, to be held at the college, decided to erect a memorial arch at the east entrance to the Central College grounds. A committee was appointed that solicited designs and bids from various firms engaged in the business, and out of a number

of special designs submitted, selected that tendered by the Enterprise Foundry & Fence Co., of Indianapolis.

This arch was erected and in place, for the dedication ceremonies on the date of the class anniversary, and was admired by a great many people assembled at Greencastle at that time. The arch was accepted by the presi-

dent of the university in a very happy address that marked the interesting dedicatory exercises.

The high character of the work and the handsome design have made the arch a substantial addition to the decorative features of the campus.

As both a useful and ornamental memorial it is especially appropriate.



MEMORIAL ARCH ON CAMPUS OF DE PAUW UNIVERSITY

PARK NEWS.

Original Entrance Examinations for Head Florist and Florist have been ordered by the Civil Service Board, the West Chicago Park Commission, to be held at the Garfield Park Pavilion, Chicago, Ill., on February 27th. The examination will be both oral and written and will include, for the Head Florist, questions on horticulture, botany, and the care and propagation of plants for exhibition purposes. For the Florist there will be an oral and a practical test in greenhouse work, and written questions on the care and propagation of plants and greenhouse operations. The respective salaries will be from \$140 to \$200 per month for the Head Florist and from \$2.25 to \$2.50 per day for the Florist. Application blanks may be had by applying to the Civil Service Board, Room 706, Wendell Bank Building, 1551 West Madison St., Chicago, and must be returned before 5 p. m. of February 26th, 1912.

At the annual meeting of the American Society of Landscape Architects, held in the Transportation. Club, Hotel Manhattan, New York City, on January 9, 1912, the following officers were elected for the year: President Harold A. Caparn; Vice President, Warren H. Manning; Treasurer, Henry V. Hubbard; Secretary, Charles Downing Lay. Member of Executive Committee to 1915: Percival Gallagher. Mr. Charles A. Platt was the guest of honor, who spoke informally on "The Relations Between the Architects and Landscape Architects."

For the first time in years, and perhaps for the first time in their history, the trees of Capitol Park, Sacramento, Calif., are being subjected to a cleaning process, including tree surgery. The work is being done under the direction of State Gardener W. Vortriede, who has had every tree examined, cleaned and trimmed.

For some time past Charles J. Steiss, secretary of the Park Board of Fort Wayne, Ind., has been gathering up information, by correspondence, on the increase of value in property adjacent to city parks, and has found that a largely increased value in the surrounding property immediately follows the establish-

ment of a park. The evidence as to whether the people believe in voting bonds for park purposes amply justifies the wisdom of resorting to that method of obtaining funds for park development.

West Duluth, Minn., business men and residents are very much stirred up over the exorbitant prices being asked by the property owners in the vicinity of Kingsbury Creek, which is needed for the Fairmont park addition. Condemnation proceedings might bring such citizens to reason.

Park Improvements

The Chicago South Park commissioners are preparing for extensive improvements this year. It is proposed to spend \$25,000 on a pumping station for the supply of Washington and Jackson Parks and the Midway. Improvements in many of the small parks are to be undertaken. Field houses are to be erected and swimming pools and gymnasiums are to be installed. All parks in the South Park System in the future will have field houses of much larger dimensions than those hitherto constructed; much attention is to be given to the field house proposition in connection with the neighborhood center idea.

The improvement of the park on the hill overlooking the harbor at San Pedro, Calif., is nearing completion. The unsightly sand bank beside the city hall has been smoothed into a gentle slope and put into lawn, with a wide flight of concrete steps on the Front street side leading down to the sidewalk. The unsightly band stand has been torn away and replaced with a concrete and rubble stone lookout roofed with Spanish tile, and considerable planting adds to the improvement.

The last legislature of Tennessee made an appropriation of \$20,000 for the improvement of the State Fair Grounds at Nashville, for which plans were prepared by Mr. Warren H. Manning. Among the improvements suggested are an additional loop car service, a large swimming pool in the center of the infield, with some 500 benches about the infield, its beautification as a park, and the construction of two tunnels under the track to make it more accessible; an extension of the grand stand on the will have an effect on the eyes of

south end; the erection of a small administration building behind the Davidson County building, and a fire, police and press building southwest of the grand stand; a horticultural hall, and a building for the display of poultry, cattle and swine.

Mayor Baker, of Cleveland, O., will ask that out of the \$4,000,000 bond issue, \$1,000,000 be devoted to the parks. It is planned to build play grounds and improve the parks with more shelter houses, better recreation fields, bathing beaches and bath houses. Superintendent Alber is outlining a plan for the further development of the parks and city play grounds. He wants a zoo at Brookside park that will be a real zoo.

Plans for the permanent improvement of Onondaga Park, Syracuse, N. Y., prepared by Superintendent David Campbell, have been submitted to the Syracuse Park Commission and approved. Among the unique features are the lake, maple grove and system of driveways and walks leading up to the highest point in the park, where it is hoped that some time a fine pavilion will be erected. The lake is already being constructed from the old Wilkinson reservoir. When completed it will be some 800 feet wide and 1,600 feet long. Boat house and bathing facilities are to be provided in connection with the lake attractions.

The Boston "Transcript" says: With the announcement that the Boston Art Commission was having studies made of the Charles street side of the Public Garden to provide for the construction of a mall and the placing there of the Commonwealth avenue statues, interest was aroused over the possibilities of a new artistic effect and added convenience to the public. A tentative plan has been drawn by Olmsted Bros., landscape architects, of Brookline, and submitted to the Art Commission which suggests great attractiveness. The plans provide for the placing of eight statues, six on the mall and two at the ends, and they would be located in attractive settings. The Olmsted plans face the statues to the west with shrubbery and trees as a background against the existing fence, so that if one walked down the proposed mall of eighteen feet in width, from Beacon street to Park square, he would come upon the statues a little more than 150 feet apart on his left. The plans call for a setting of these statues in so refined and pleasing a manner that they

the beholder at once quiet and unobtrusive and prove therefore nothing like the distraction offered at present by a walk on the Commonwealth avenue pathway. The statues are made to fit into the landscape, but in no way as a controlling feature. The trees and shrubbery at the back and on the sides of each statue will not only bring out an effect appealing to every idea of beauty, but with seats to be provided opposite each one, will lead to a more critical study of the subjects and to a more intelligent appreciation of statuary in general by imparting ideas generally overlooked in craftsmanship and sentiment.

With the idea in view of making Washington park the large central park of the city of Cleveland, O., it is proposed to purchase Forest City park, the amusement park adjoining Washington, and make it one with the city park. Some years ago the property was offered to the city by the owners.

The work of improving the enlarged park around the State House at Trenton, N. J., has been progressing by the demolishing of the dwellings on Delaware street opposite the Capitol building.

New Parks

Houlton, Me., is to have a park; \$10,000 has already been pledged to buy the A. A. Burleigh homestead lot on Pleasant street.

Park Superintendent J. M. Paige has about completed the beautiful park surrounding the city hall at Pomona, Calif. Lawns have been made and appropriately planted, and a water system laid down by means of which the entire park can be irrigated with one turn of a lever. The system is patterned from that in Central Park, Los Angeles.

The old Seneca Indian burial ground, Buffalo, N. Y., will soon be turned over to the city in the shape of an attractive park. The property is about 300 by 200 feet and every inch of it is associated with incidents connected with the early history of Buffalo, when, more than 100 years ago it was a struggling little trading post huddled close to the shore of Lake Erie and along the banks of the Buffalo creek. The historical plot was purchased and given to the city for a park by Mr. and Mrs. John D. Larkin.

Anton G. Hodenpyl, of New York City, has purchased 40 acres on the north side of Reed's Lake, a favorite resort close to the city limits of Grand Rapids, Mich., with a view to donating it to the city of his birth for a park for the people. He has had this in view for some time. It is a beautiful tract, well diversified and has a fine lake frontage. This gift is said to be worth \$80,000. Mr. John H. Bonnell has offered a block of fifteen acres on the same lake for park purposes. Both properties will be held for the city by the Grand Rapids Boulevard Association.

Kolb Park is to be a new park in Paducah, Ky. The park commissioners propose to make this one of the most attractive in the city.

The signing of a contract with W. E. Both & Co., for a tract of land bordering on the river opposite the Julia Davis park at Boise, Idaho, by the city council recently, marks another important step in the plans for beautifying Boise.

Work has started on a 40-acre pleasure park and game preserve, which has been donated to the town of Bishop, near Corpus Christi, Texas, by Mr. F. Z. Bishop. The work of beautifying it has been given a landscape gardener from Washington. Fifteen deer are now in the deer enclosure of five acres, surrounded by a 7½ foot high wire mesh fence.

Charles City, Ia., has made its first move in the purchase of a large public park. The park board has completed arrangements for the purchase of the Sherman woods. This is a beautiful timbered tract of 74.57 acres, close to the heart of the city and was bought for \$9,499. There are several little creeks in the tract and it can quickly and cheaply be converted into one of the most beautiful parks in the state.

An interesting fact in relation to the park presented to Warren, O., by Mr. J. W. Packard, president of the Packard Motor Car Company, is that the donor is blind, and in order to give him the pleasure of knowing something of the present physical characteristics of his gift, Mr. George Rettig, landscape architect, has prepared a relief model of the Japanese garden included in the plan of improvement so that Mr. Packard may go over it with his fingers. Later a relief of the whole park will be made. The park is a block of 45 acres.

Morgan Park, Ill., is to have a new park. This is one of the beautiful suburbs of Chicago which has up to date successfully combated the effort to include it within the great city's limits.

A new park in Mobile, Ala., the site for which has just been purchased by the city commissioners, will be named John T. Morgan Park,

in honor of the late senator from Alabama.

Park Reports.

The annual statements of the president and superintendent of the Parking Commission of New Orleans, La., to June, 1911, give an interesting resume of the work accomplished during the two years of the Commission's existence, and its proposed line of activity. The trees of the city are to receive adequate attention, and the improvement scheme, briefly outlined, consists in the merging of the boulevards into City Park avenue, bringing the City Park and perhaps some fine adjacent lakeside park by a continuity of boulevard tree extension, into the heart of the city. Superintendent Baker says the electric current wires passing through the trees "are a public utility" and "must be preserved intact" notwithstanding the probable mutilation of the trees, and declares that a "change of conditions must be effected during the next decade." This is too long to wait for the trees should have first consideration; the utility companies conducting current by wire through the trees should be persuaded or compelled to use insulated cables. No tree commissions now-adays permit the utility corporations to mutilate the trees.

The annual report of the Commissioners of Tower Grove Park, St. Louis, Mo., for the year ending December 31, 1911, is an interesting review of park work during an almost unprecedented season. On the financial side the total receipts for its care and maintenance amounted to \$30,187.39, and the expenditures to \$28,249.51, which latter included labor, \$18,064.30; salaries, \$1,900; music, \$1,608, etc. In climate it was a year of contrasts through which the lawns and trees suffered more or less by reason of drought and destructive insects, although no very serious trouble was experienced. It is pleasing to note that in spite of peculiar conditions, as to the lay-out of the park thoroughfares, no accidents occurred from the careless driving of automobiles, and no trouble was experienced in handling the visitors. Considerable improvements made in the drainage arrangements. Decorative gardening was successful and the water garden under Mr. James Gurney was especially creditable. The children's play ground which was established and equipped in 1910 has been still more elaborate in the provisions for the little ones' exercises.



THE VALUE OF A GOOD CEMETERY PLAN

Ray F. Weirick, the Des Moines landscape architect, recently contributed to *The Leader*, in that city, an interesting little explanation of the value of good cemetery planning that illustrates the manner in which the modern ideas of cemetery development should be presented to the public.

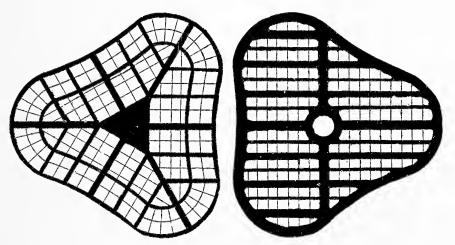
Mr. Weirick showed the illustration reproduced here to contrast the old and the new style of cemetery layout and discussed the subject as follows:

The cemetery has always been a center of superstition. More than that, the forms and practices peculiar to burial grounds, when once established, have been almost impossible of alteration. If a tombstone dealer sets up a few slabs of marble (which has demonstrated itself to be an extremely poor stone in this climate) he has established a precedent for tiers of thin pieces of crumbling stone. If lots are laid out with the long way pointing east, everyone demands a lot so located. More than this, the laws governing cemeteries in every state are so stringent that it well behooves every man desiring to make changes in a burial ground to first learn just how far it is safe for him to go.

For some strange reason, in the early days it was the custom to isolate each lot from every other. This has led to a practice of wide alleys and drives in the older cemeteries. Not only are such public spaces expensive to maintain in proper condition, but an unnecessarily large percentage of land is allowed to lie idle in place of being a source of income. The evil does not stop here, but it very frequently happens that lot owners cause their corner stakes to be set several feet out into the allevs and drives, stealing from the public space. Drives and walks are needed only for the accommodation of the public and it is wasteful to provide more space than necessary.

The illustration shown herewith is a striking example of the economy of employing expert advice in designing cemeteries. A section is shown in a burial ground in Alabama. The local surveyor had laid out the grounds. His plan was rather more elaborate than is usually found in such cases, following the outlines of an elm leaf, and every lot was bordered by at least two strips of public ground. His straight lines fitted awkwardly to the uneven ground, and his arrangement resulted in sunken paths, raised lots and haphazard planting. A landscape architect was employed to replat this one section. Under the new plan, plenty of walks

city, under the old plans by which the grounds were laid off, fully twofifths of the valuable space was staked out for roads. This is about ten times as much space as is actually needed now, after the cemetery has reached its capacity. If the Iowa laws would permit a replatting, enough revenue would be realized to perpetually maintain the grounds and also build a number of fine improvements. This handicap has been a serious problem in the work of the last few years of trying to medernize Woodland cemetery.



THE OLD AND THE NEW WAY OF LAYING OUT A CEMETERY.

and drives were provided and irregular lots were given over for group planting. By this revision, an extra 9,375 square feet of lot space and 1,765 square feet of unnecessary road was made available for sale, yielding \$11,524, which was considerably more than enough to pay for all professional charges and cost of revision.

The plan of a cemetery in Sedalia, Mo., was revised by a landscape architect, resulting in the sale of extra land to the amount of \$120,000, and a saving of \$12,000 in road construction, making a total of \$132,000 to the credit of the cemetery management, or a profit of 440 per cent on the cost of the new cemetery plans. In Woodland cemetery of this

A very common fault is to so locate the drives that much valuable ground is lost, and expensive grading made necessary. For the reason that lots below the level or a drive are regarded as "low" and undesirable, drives should always follow the valleys, and under the same principle the entrance should be at the lowest point. The antiquated custom of mounding up the surplus dirt and allowing projecting foot and cornerstones, makes the lawn cutting cost annually ten times what is would in a "burial park."

Just as in other lines of business, it pays to exercise good judgment and keep up with the times in cemetery work.

WHAT ENGLAND CAN TEACH US ABOUT GARDENING

"What England Can Teach Us About Gardening," by Wilhelm Miller, is a message to the American people. It does not record progress as Dr. Miller states in the preface, but its object is to stimulate—and stimulate it does. The preface concludes as follows:

"Let every country use chiefly its own native trees, shrubs, vines and other native material, and let the style of gardening grow naturally out of necessity, the soil and new conditions." When we stop imitating, and do this, America will soon find itself. And of English gardens the author says "the charm of English scenery is explained; it is a revelation of national character."

Dr. Miller treats his subject in a thorough and systematic manner, and writes entertainingly. His criticism of his countrymen is done in an honest, upright way, and he strikes the spot every time; and it is gratifying to know that Dr. Miller knows his material, knows all about what he writes, and for this alone his suggestions and advice become very valuable. statements are conservative, and time and again he warns against copying plantings from English gardens. "We have failed to get English effects because we have used European material. We can get many of the English effects by using equivalents from America and the far east, Japan, China and Korea." He explains that the last named countries have climatic conditions very much like ours, and this is quite true, but if we insist on typical American landscape, beware of our eastern friends. Dr. Miller asserts "that the only fundamental thing England can teach us is the spirit of gardening, and not as supposed, that the secret of England's loveliness is that she has the best material for gardening."

The book deals at length with landscape gardening, after which a short chapter is written about formal gardens, which he says is "to exhibit man's mastery over nature," calling attention to the many mistakes we make in formal gardening and to some of England's—which is justified. He concludes that "if we want a columnar tree we should not long for the Italian Cypress, but plant our own red cedar—and never trim it."

Dr. Miller comments on the well known Larz Anderson garden as a type that may become the motive for an American style of formal gardens. The writer has some doubts as to this prophecy. Our northern gardens must permit us to live with them all the year around. There are but a few who can afford to have more than one residence, and they have no important part in the development of an American style of formal gardens. Stone and concrete walls are cold and forbidding in winter. We have no vines that will cover them with green foliage during the winter months, as is the case in England. Large concrete pools without water, fountains, urns, etc., are equally as cold, especially with masonry walls as a back ground, and they suggest death instead of life. We must have warmth in our gardens in the cold winter day-and poetry, too. When we mean the word American here, we mean the northern states, and do not include protection walls for the vegetable garden. Neither can we agree with the author when he says, "we should wish all the California conifers had been able to cross the divide so that the east might hope to have hardy forms of all these Titanic trees." How wonderful is nature's work, in spite of man's desires, and what a pity if California could be robbed of its native characteristics. We Americans are inclined to steal the treasures of art from Europe, just as the Romans carried away works of art from ancient Greece. With man's work this is possible, unfortunately so, but with the work of nature it is not always so. We shall always have five great distinct landscapes in spite of man's supremacy: the Pacific Coast, Rocky Mountains, Gulf Coast, Atlantic Coast and last, but not least, the great North American Plains. Let every region develop its own peculiar beauty, individuality and characteristics. But I know that Dr. Miller agrees with us. His patriotism is sincere and his great book permeates with love for his native flora. We are traveling the same road—hand in hand, he from the Atlantic and the writer a pioneer of the great prairie, but we must cross swordsin friendly combat.

Dr. Miller refers to the English plan of thinning out woodlands, so as to give each tree more room for development, and planting the forest floor with native flowers. In another chapter he suggests that this way of treating woodlands should only be adopted on large estates. Certainly—but are we to close our eyes to the great intimacy, the great friendship—harmony that exists between trees

and trees, and trees and shrubs, vines and other plants of the forest, which is just as great as that of the human family? Sometimes even supreme man may be taught a lesson from the association of trees, or the tolerance or protection of the weak by the strong, aside from the picturesqueness which such association gives to the forest. Is it not a fact that in the deep shadow of such groups we find some of our rare plants protected as it were? We need to be told continually that the great show is not art, and without effort life is not worth while. Let us have light, shadow, secrecy and mysticism in woodlands, as well as contrast, and not sameness. Let us have tall towering trees with Gothic arches, trunks with the mark of ages; let the forest border depict its feminine character, here where light and sunshine rules supreme, but let the forest teach us the story of the woods not unlike man's own. Let us also remember the birds that we must protect. That dead and decayed wood should be removed is not questioned, but the writer would dislike to have some of the tree doctors in his woods plastering up every hole to the detriment of the denizens of the forest.

Dr. Miller offers many valuable suggestions as to what would give an equivalent effect with American plants. Unfortunately some of the plants, as Rhododendrons, Mountain Laurel, Holly, etc., are forever barred from the prairie gardens except as exotics.

The book gives a list of plants adapted for rock gardens in this country and gives some valuable hints on bog gardens, wall gardens, rose gardens, perennial borders, etc. It devotes twenty-six chapters to the different phases of outdoor gardening. Each type treated is a separate chapter.

Dr. Miller is an enthusiast and an optimist in the extreme, and we hope that all his predictions will come true, even that of growing our own bulbs. The book is written in a forceful, fearless manner. It points out mistakes, but in return offers remedies. This book should be in the hands—not in the library, of every lover of horticulture, as it is the best effort in horticultural literature that has been laid before the American people.

Jens Jensen.

"What England Can Teach Us About Gardening;" 359 pages, 9½x6½ in. Doubleday, Page & Co. Price \$4.00

GENTIANS OF OUR NORTH-EASTERN STATES

By Wilfred A. Brotherton, Botanist, Rochester, Mich.

Gentians have ever had many admirers. Very many of the 200 species of gentians are cultivated in Europe as ornamentals. In this country they have received comparatively little attention. Of the 200 species of this genus, most are European or Asiatic, only about 40 or 50 being American. Of these I propose to describe nine species, most of the balance being western. But before giving descriptions I wish to note that there are practically three groups as to regard to culture, and I think it well to first describe the methods by which the first group may be cultivated more or less successfully.

Section 1. Fringed Annual Species.

This is an exceedingly handsome group and one which very many people have vainly tried to cultivate. After many years spent in the study of this group, I have learned the following about their characteristics which may throw some light upon their successful culture:

While the Fringed Gentians are among the latest of all plants to flower, and ripen their seeds in a very low temperature, the green pods are not hardy enough to endure a long-continued, or very severe, freeze. Just as sure as a heavy freeze comes after the seed pods have formed, and before the seed pods have perfected, every seed will be ruined beyond redemption, and will under no circumstances germinate. The seeds of this group are covered with a sort of down or fur, and are black or a very dark purple. The seeds that will not grow are very small and very light in weight.

These seeds ripen late in the season if the severe freezing does not destroy their germinating powers, and by the time they ripen the ground is covered with snow. As the pods slowly open the seeds fall out upon the snow, and as the snow melts they slowly settle through it until they reach the cool moist earth very late in the winter, being ready to germinate in earliest spring, when the temperature is still very low and the ground still cool and moist, the plants being well developed before the dry hot summer weather begins. Therefore, if we wish to successfully grow this group, we must imitate natural conditions as much as possible by sowing upon the snow, in early winter, freshly gathered, well ripened seed.

The Fringed Gentians grow on both

moist, mucky land and on low, sandy plains where the water level is within about a foot from the surface in dry hot weather. Both these soils are very porous in dry seasons.

I have found them growing under trees in shady swamps, or in swamps where the only shade is a scanty growth of low slender shrubs, on low open sandy fields, even, occasionally, in clay lands, and in low marsh areas amidst a very dense and heavy growth of coarse hedges, in each location seeming to flourish well. Still the largest plants I ever saw were growing on low sandy plains. They seem to flourish about lakes, streams and springs.

Hence, after one carefully considers all these facts, I see no reason why he may not succeed in successfully growing them. With this by way of introduction, I shall proceed to describe some of our native American Gentians. Large Fringed Gentian (Gentiana Crinita Froel.).

This species is one of the most beautiful of the genus, and is the one the most people have failed in growing successfully. I see no way of failing if they pay attention to my remarks at the beginning of this article. Without doubt some one may find a thoroughly successful means of growing this elegant species, as some are successfully growing the Trailing Arbutus.

The Large Fringed Gentian grows from 1 to 3 feet high, leafy, and usually much branching, the branches usually ascending at an acute angle from the stem; stem and branches somewhat 4-angled, seldom purple. Lowest leaves at the root, obovate, obtuse; upper leaves all opposite, as in other Gentians, lanceolate and oblong-lanceolate, 1 to 3 inches long, acute or acuminate at apex, sessile by a rounded or sub-cordate base. The flowers are borne on the long slender peduncles terminating the many branches, often very numerous on the plant, on a very large plant 100 or more. Each flower is about 2 inches in length, usually 4-parted, that is, with four sepals and 4 sepals. Calyx conspicuously 4winged. Corolla deep purplish-blue, or sometimes pure white. Petals beautifully deeply fringed: Range, Quebec to Minnesota, south to Georgia and Iowa.

The Smaller Fringed Gentian (Gentiana Detonsa Rottb.).

Nearly or quite as handsome as the preceding species. Plant about a foot

tall, somewhat to considerably branched, the branches usually curving at beginning; stem and branches usually dark purple. The rosulate root-leaves, spatulate and obtuse; stem-leaves, linear or lanceolate, long and narrow, much larger than root-leaves. Flowers also long-stalked, somewhat smaller than those of the last, 4 to 6-parter, usually 4-parted. Calyxlobes, lanceolate. The calyx is more winged than that of the last, of a different form. Corolla dark purplish-blue, narrow-bell shaped, its lobes spatulate-oblong, much less fringed than the larger species. I am describing this species from memory to a large extent, and there are some details I cannot just recollect, as it is about twenty years since I saw this plant. When I was a boy it was quite abundant in southeastern Michigan, but in my locality it has disappeared before pasturing and draining, so that I have not met it in many years. It is evidently much less able to resist rough usage than the Larger Fringed Gentian is. As I remember it, the branches mostly started from near the ground, curving outward from where they first left the main stem. This habit, the purple stem, and the peculiarly winged calyx, which is conspicuously different from the first species, readily distinguish it from the first species, even when the flowers are not open. I am exceedingly sorry it has disappeared from my own locality. It should be carefully preserved where it yet remains. Grows usually in wet, mucky soils, in swamps and marshes. Range, from Newfoundland to Alaska, Anticosta, New York, to Minnesota, South Dakota and in the Rocky Mountains, and Sierra Nevada. Also in Europe. Sometimes incorrectly called Gentiana serrata.

The same remarks as to cultivating first species apply to this also.

Section 2. Annual or Biennial, flowers not fringed, seeds round.

Five-Flowered Gentian (Gentiana quinquefolia L., Gentiana quinqueflora L.).

About 1 foot tall, stem four-angled, branching; root leaves spatulate, obtuse. Stem leaves ovate, acute, clasping, rounded or sub-cordate at base. Flowers on short, slender stalks, in groups of 4 to 7 (generally 5), at ends of branches, tubular, bell-shaped, bright blue, rather small, about three-quarters of an inch long, but pretty. Seeds round, as also in the next, very unlike

the seeds of the other groups, which are furred or winged. Ontario to Michigan, south to Florida and Missouri. A pretty species, but much less showy than the others; like the next, growing very readily from the seeds.

Western Five-Flowered Gentian (Gentian quinquefolia occidentalis).

The prevailing form in Michigan, so very much larger in every respect that it should be considered a different species. Grows 2 to 3 feet tall, usually very branching, with very numerous and much larger flowers than last in Michigan, of a bright red-purple, but said to be blue in other places. Though the flowers are not as large and showy as other Gentians, this is well worthy of cultivation. Besides, it is so much easier to grow from seeds. In Michigan the plant is certainly a biennial, but is said to be an annual in other places. It differs from last in its much larger size, more broad funnel-form corolla, and foliaceous calyx-lobes reaching to the middle of the corolla. Range, Ohio, Michigan, to Minnesota, Tennessee and Louisiana.

Section 3. Perennial Gentians. Hdy.
Downy Gentian (Gentiana puberula
Michaux.).

In my estimation this is the handsomest of all our American Gentians, its richly colored flowers surpassing all others in beauty. About 1 foot tall, one to several stems arising from same root, the root very branching, growing deeply in the soil. Stems downy, leafy, nearly round. Leaves firm, lowest oblong, upper lanceolate, highest linear. Flowers 1 to 11/2 in. long; calyx segments linear, about as long as the tube; corolla campanulate-funnel-form, 3 to 4 times as long as the calyx, opening about as widely as the Large Fringed Gentian, of a rich dark bluish-purple, sessile, from one to several in the axils of the upper leaves, and also terminal, so arranged as to make a good sized terminal cluster. Corolla lobes, ovate, entire, not at all fringed or toothed, very much longer than the peculiar, fringed appendages between the corolla lobes so characteristic of the perennial group of Gentians. Unlike the flowers of most of our perennial species, the flowers of this species open very widely, like those of the Fringed Gentians. Like the other perennial species, the flowers are very lasting in character. A group of this species planted in front of taller plants or shrubs would be a most beautiful sight when in full bloom. Tastes differ, but in the estimation of the writer this species excels all other American species in beauty, not excepting the Large Fringed Gentian.

In southeastern Michigan this is one of the rarest of plants, ever the companion of that exceedingly rare and very handsome but smallest of native lilies, the true Lilium umbellatum (not the Japanese lily usually cultivated as Lilium umbellatum, which is correctly and properly called Lilium elegans Thunberg, a very handsome lily indeed, with plant about the same size, but with flowers much larger than the true Lilium umbellatum, also much coarser, nevertheless one of the best lilies in cultivation, too good to be sold under a false name). They grow together. the Downy Gentian and the Lilium umbellatum, on tops of high, dry, sandy, shady, or not shady, hills, at an elevation of at least 1,000 feet, in southeastern Michigan, both among the rarest of plants. It, however, grows fairly abundantly in western Ontario, near the shores of Lake Huron, in sandy soils, deep and dry. This rare and handsome Gentian is worthy of a place in our choicest formal gardens. very much more so than many foreign plants we cultivate in our formal gardens, parks and cemeteries. Dr. N. L. Britton, director-in-chief of New York Botanic Gardens, gives its range as "On prairies, Ohio, to the Northwest Territory, Georgia and Kansas."

Soapwort Gentian (Gentiana Saponaria L.).

One of the largest and tallest of American Gentians, a giant compared with all the others I herewith describe, often 3 feet or more tall, very rank and stout growing, smooth or rough-down, with large lanceolate, ovate-lanceolate or oblong leaves, which are usually acute at both ends, 2 to 5-veined, the lowest obovate and smaller. From one to many stems rise from a large, thick branching root, growing deeply in the ground. At the top of the stems, and in the axils of the upper leaves, are very large broad clusters of large sessile flowers, each flower 1 to 2 inches long, of a light reddish or purplishblue, these dense clusters often 5 or 6 inches or more across. The individual flowers are much larger than those of the next species, and open widely considering the very short corolla lobes. It grows in wet or dry, usually sandy, soils. Ontario to Minnesota, Florida to Louisiana. It is really a very handsome plant, but when cultivated due allowance should be made for its very large size. It should be grown either in isolated clumps, or as a background for smaller species, or in center of bed. Closed Blue Gentian (Gentiana Andrewsii Griseb.).

One of the handsomest and most curious of Gentians. Its large blue

flowers never open. Very many people, unacquainted with this characteristic, have patiently watched the "buds" of this flower for days at a time, but always in vain, for they ever remain closed. A large group of this species is indeed a beautiful sight when in full bloom, coming, too, as they do, so very late in the year, when flowers are conspicuous by their absence. This Gentian is not a rare and select aristocrat, like the Fringed Gentians and the Downy Gentian, which very few will probably ever enjoy cultivating, but emphatically the people's Gentian. which almost any one may grow almost anywhere to satisfaction. It is to Gentians what the Ostrich Fern is among ferns—a choice and beautiful species any one can grow with good, hearty satisfaction.

Plant 1 to 2 feet high, stems coarse, very many from an old root, forming a large clump, increasing in beauty with age. Root large and branching, deep into the ground, usually very difficult to dig from its native habitat. Leaves dark, rich green, very smooth, ovate to lanceolate, rounded at apex, narrowed or sometimes rounded at base, the lowest smaller, ovate or oblong. The flowers are smaller, and of a darker shade than those of the Soapwort Gentian, 1 to 11/2 inches long, bright purplish-blue, or sometimes white; if white never of a yellowish tint, never opening, hence common name, growing in large dense terminal and auxiliary clusters, sessile in the cluster. Grows naturally in rich moist soil, usually in heavy black muck, among coarse tough-rooted sedges, hence the great difficulty of digging it in its native haunts. Because of this difficulty of digging and its rareness, compared with most species of wild plants, not of Gentian tribe, it will remain rather expensive until some expert nurseryman or florist grows a supply from the seeds. More in this line in conclusion of this article. One of the best of all plants for setting in marshy places, along shores of rivers, lakes or ponds or other ornamental waters, where no one will make a mistake by planting it in large quantities, setting it quite closely together. Still a single large old plant makes a fine show when in bloom. It grows very well in the formal garden, taking kindly to almost any good garden soil, not too dry or too sandy. It is not best to plant it where more conspicuously showy plants are called for, but there are quiet nooks in every formal garden just suitable for this plant, where the brilliant-hued species would be entirely out of place. It is an excellent cut

flower, lasting a very long time after being cut. The white-flowered form is very fine indeed, of a more clear white than the flowers of the next species. Range: Quebec, to the Northwest Territory, Georgia and Missouri.

Yellowish Gentian, White Gentian (Gentiana flavida Asa Gray, 1846).

In 1848 Dr. Asa Gray named this plant as Gentiana alba in his Manual, but this name had been given by Muhlenburgh to the white variety of Gentiana Andrewsii in 1818, making this name untenable.

This very handsome Gentian is much larger than Gentiana Andrewsii, ranking next to Gentiana Saponaria with respect to size. Plant, even without flowers, very handsome, growing like the other perennial Gentians in tufts. which become very large with age, arising 1 to 3 feet from a large, coarsely branching, yellowish, very bitter root, the whole plant being very bitter, as are all our other Gentians, all being excellent tonics in medicine. Leaves of very light clear green, contrasting finely with the dark green foliage of Gentiana Andrewsii, somewhat shining. Flowers much larger than those of the Closed Blue Gentian, 11/2 to 2 inches long, campanulate-funnel-form, opening very widely for the group, in very large auxiliary and terminal clusters, sessile, yellowish or greenish-white, indeed very neat and handsome-if anything, handsomer than Gentiana Andrewsiiand, like it, well worthy of a place in any flower garden. While it sometimes grows in wet marshes or swamps like Gentiana Andrewsii, it usually grows in dryish to dry sandy soils, in shade or sunshine, either bordering swamps, streams or lakes, or on quite high hills. Just as easy to grow as is Gentiana Andrewsii, flourishing in dryer and more sandy places than that species will. Range, Ontario to Virginia, Kentucky to Minnesota.

Narrow-leaved Gentian (Gentiana linearis Froel.).

Unlike the other perennial species I have thus far described, this is a very slender species, growing from 8 inches to 2 feet high, tufted, leafy, very smooth. Leaves very narrow, linear or lancelinear, acute at both ends, 3-veined. Flowers in auxiliary or terminal clusters, more slender than the others I have described, 1 to 11/2 inches long, oblong-funnel-form, blue, open, with short, rounded, erect corolla lobes. A very pretty plant, found in bogs and on mountains, New Brunswick and Ontario to Maryland.

Red-stemmed Gentian (Gentiana rubricaulis Schwien.).

Tufted, 1 to 2 feet high, very smooth, with slender, round stems, and rather distant, lanceolate or ovate-lanceolate leaves, rounded at base, and acuminate at apex, lower narrower and obtuse. Flowers in dense terminal and auxiliary clusters, sessile, larger and broader than those of Gentiana linearis, 11/2 inches long, greenish-blue or bright blue, open. The ovate, acute corolla lobes are much longer than those of Gentiana linearis. Very unlike that species in all other respects, and well worthy of a place in our ornamental gardening. Range, in wet soil, New Brunswick, to central New York, western Ontario and Minnesota.

The Propagation of American Perennial Gentians.

All may be grown by divisions of the roots, being sure to so cut the roots that one or more buds are left upon the crown. I think the best way to grow them in large quantities is from the seeds. All our perennial species have very light, chaffy seeds, more or

less broadly winged, white or yellowish, very small. All Gentians have seeds that germinate best at a very low temperature. The best way to grow them is therefore to sow them in the fall as soon as ripe in cold frames or cool greenhouses, in a moist atmosphere. Being very small, they should be sown very shallow, but under no consideration suffered to dry out. Should be kept partially shaded until the plants are well up. It would be useless to undertake to sow these Gentians in the open ground in the spring, as the weather would become too warm before the seeds would have a chance to germinate and grow sufficiently large to endure the warm sun's rays. Should the ground become too hot and too dry before the plants are well started, the plants would be quite apt to die. This probably explains why so many have failed in growing our native American Gentians from the seeds. I close, hoping I have aroused a special interest in these beautiful native flowers, and helped some on to their successful cul-

ANSWERED ASKED A N D

An exchange of experience on practical matters by our readers. You are invited to contribute questions and answers to this department

Watering and Trees.

Since the discussion of watering street trees recently published in this department, the interesting illustration of the German method of tree watering shown here, appeared in Moeller's Deutsche Gaertner-Zeitung, with a descriptive account of the work as carried out in Hanover by Arthur Glogau, Chief City Gardener of Hanover. Mr. Glogau says:

"Whenever the trees were cared for in the right way and given sufficient attention, there was not the slightest trace of damage. In the district assigned to my care, all the trees planted along the highway (including even the acacias, although these are taken care of last of all), start to receive a thorough watering already in May or June. The plan followed is to give each tree of medium size, at least one cubic meter of water, care being taken not to cut or destroy the roots which are sometimes uncovered when the soil from around the base of the tree is temporarily removed. The accompanying picture shows just how this is done. Six weeks later this watering is repeated, the tree being fertilized with

Cultivating Street manure whenever that is possible and seems necessary. The results of this process were excellent; even the most excessive heat did not damage the trees in the least. This year, bearing the experiences of past years in mind, I watered the trees even more thoroughly than ever before, and results far surpassed those in the past. The red chestnuts which are usually among the first to display seared leaves, and barren tops, this year retained their green foliage much longer than in past years, due solely to this watering process. The maples, which so often are attacked by disease, and also shed their green leaves so early, have shown much greater durability owing to the satisfactory humidity of the soil. The lindens, and even the rare variety of Krimlindens, which are always the easiest prey of the heat, have responded gratefully to the watering and kept their freshness much longer than us-The Hungarian silver-linden, ually. Tilia tomentosa, which is usually a very good road tree, being by far the most hardy of the Lindens, proved more durable than ever. The red whortleberries, Sorbus Aria lutescens, gave me the greatest pleasure, how-

ever, because they did not lose a single leaf till late fall, thus maintaining their reputation as being among the best of road trees. I had a very peculiar experience with Elms, Ulmus glabra vegeta. Owing to the carelessness of one of the district gardeners, one group of these trees was not sufficiently watered, and as a result, as early as the month of June they were almost barren of foliage, in fact I suspected they had been attacked by some sort of a disease, which is often true of elms. But a most thorough watering proved the best remedy to stop the threatening death. In a very short time after the application of this process the trees were again covered with beautiful foliage, notwithstanding the burning rays of the sun. The fungi and the rust disappeared, and the trees remained in fine condition.

"I shall now enumerate a few trees which are peculiarly sensitive to the attack of the sun rays but which showed fairly good results. The American oak Quarcus palustris, and the horse-chestnuts, need a very thorough watering, but keep very well if they get it. The planetrees lost their leaves even when given very much water, but not as rap-But no amount of idly as usual. the birch-trees any watering did good, they losing their leaves very rapidly and becoming entirely bare rather early. However this same experience has been had with these trees in less arid summers, and the unfortunate results must be attributed to other causes.

"I want to relate one more experience of the greatest importance: As an experiment, some of the trees were sprinkled very thoroughly at a time when the sky was cloudless. This artificial rain produced most unfortunate results. The leaves were nearly altogether burnt. The same has been observed to be true in the case of bushes which have been sprinkled by grass-sprinklers placed nearby."

In commenting on the above described methods, Mr. Jens Jensen, landscape architect of Chicago, says:

"When I had charge of the West Park System, the trees on the boulevards in the heart of the west side were sprayed for the purpose of washing the leaves clean from soot and dust. I did not, however, find any trouble with the leaves becoming burnt when the spraying was done in the hot sunshine, as the correspondent in the "Moeller's Deutsche Gaertner Zeitung" calls attention to.

I have, however, observed this burning in hot sunshine on shrubs and green house plants. Our trees were Carolina poplars and elms,"

circumstances, the object being to afford a means of supplying water below the surface of the ground which may find its way by percola-



GERMAN METHOD OF WATERING STREET TREES IN PARKWAY IN HANOVER.

Editor Park and Cemetery:

The treatment of street trees suggested by Mr. F. W. Kelsey in the January number of the PARK AND CEMETERY, is beyond question invaluable where practicable, but it is seldom that cultivation can be successfully adopted, except when the trees are quite small, in the usually very limited planting space between the street curb and sidewalk. As the trees increase in size and the roots extend far beyond this narrow area away under the street pavement, which as generally constructed is impervious to moisture, the small cultivated area around the trunk of the tree affords little or no benefit, especially in very dry weather, in supplying or conserving any appreciable amount of moisture. The tree under such circumstances depends almost entirely for water on the area inside of the sidewalk, which in many instances is quite restricted. Surface watering in such conditions is of little benefit to trees of large size, a fact lamentably attested to by the sickly, starved appearance of hundreds of trees in nearly all of our cities.

An effective remedy is found in sub irrigation, which may be adopted in a practicable and comparatively inexpensive manner by simply boring a number of small holes at convenient points around the trees between the curb and sidewalk, or inside of the sidewalk according to

tion and absorption in all directions, particularly under the pavement, to the most distant feeding roots of the trees. A very practicable and permanent plan is to bore these holes with a 4-inch post hole auger to a depth of a little over two feet, inserting two lengths of 4-inch drain tile which will always keep the hole open. The opening need not be closed if in sod and as the top of the tile is an inch or two below the surface of the ground it does not interfere with the lawn mower. Water is of course, applied most conveniently through a hose and it is surprising in most cases the quantity of water each hole will absorb, depending on the porosity of the soil. If the soil is clayey and compact and water is absorbed slowly, it becomes necessary to go over the hole several times perhaps at each watering to insure a sufficient supply. Very little skill and but little labor is required in the installation of this simple but quite effective system of irrigation. Trees in all large cities and particularly in manufacturing districts suffer materially from unfavorable atmospheric conditions, but it is perhaps safe to say that street trees in general suffer more from want of water than from any other JAMES CURRIE.

Supt. Forest Home Cemetery. Milwaukee.



THE STORY OF OUR NATIONAL CEMETERIES

Modern nations build stately mausoleums for their great generals, but are usually content to allot only the hasty trench or ditch to the common soldier. The bones of British soldiers, for example, are scattered the world around, says Kipling:

"Walk wide o' the Widow at Windsor

For 'alf o' creation she owns; We 'ave bought 'er the same with the sword an' the flame,

An' we've salted it down with our bones.

(Poor beggars!—It's blue with our bones!)"

To this rule of indifference as to the final resting place of obscure heroes the United States forms an honorable exception. There are today eighty-four national cemeteries, which contain the graves of some 360,000 American soldiers and sailors.

These cemeteries are among the finest of "God's acres" in the world and are lovingly cared for by a large corps of superintendents, overseers and gardeners.

The national cemeteries are mainly a result of the civil war. In September, 1861, the secretary of war, by general order, directed accurate and permanent records to be kept of deceased soldiers and their places of burial. The work was assigned to the quartermaster general's department. That department already had charge of the burial of officers and soldiers, but its care had ordinarily ended with the drifting smoke of the guns that were discharged over their graves.

By act of July 17, 1862, congress empowered the president to purchase cemetery grounds, to be used for the burial of "soldiers who shall die in the service of their country." Such was the intensity of the great war that for some time no action was taken under the law.

Following the battle of Gettysburg, Governor Curtin of Pennsylvania inaugurated a movement whereby several states purchased seventeen acres of ground embracing the center of the union line and caused to be disinterred and reburied there the bodies of the soldiers who had been buried outside this area. The cemetery was dedicated by Lincoln, November 19, 1863, in that perfect tribute to the "honored dead" who there "gave the last full measure of devotion." The cemetery was subsequently taken over by the nation.

The cemeteries at Antietam, Murfreesboro, Chattanooga and other places were likewise begun by states or by federal troops acting under orders of their commanders. That at Chattanooga was largely the result of the activity of Gen. George H. Thomas, in charge of the department. It is related that when the work of reinterring the dead was proceeding a question arose as to whether they should be buried together according to the states from which they came.

"We have heard enough about states and states' rights lately," said Thomas, who, though a Virginian, had remained loyal to the union. "Let us mix them up and nationalize them a little."

Other cemeteries sprang up by mere accumulation of interments about military centers, hospitals, prisons, etc. At Andersonville, for example, the dead were buried by parties of their comrades, who notwithstanding the horrors of their own lot, took pious care to keep accurate records and even erected many rude headboards. From first to last about 50,000 men were confined at Andersonville. In August, 1864, there were 32,193 prisoners penned in that dread area, the greatest number at any one time. The first death occurred February 27, 1864; the last, April 28, 1865. In that short period there was a total of 12,912-a mortality of 25 per cent.

In the summer of 1865, a force of men under Capt. James Moore were sent to Andersonville to inclose the grounds and provide headboards for each grave. They were able to identify 12,461 of the graves, leaving only 451 "unknown." The world famous nurse, Miss Clara Barton, accompanied this expedition; and wrote a re-

port so vivid that the reader cannot avoid the impression that he is viewing the scenes she describes.

Immediately after the war the work of formally establishing national cemeteries in places where union soldiers and sailors were buried proceeded rapidly. The last such cemetery to be established was that at Greeneville, Tenn., provided for by an act of congress approved June 12, 1906. This cemetery contains the tomb of former President Johnson and only ten others, though it has an area of fifteen acres.

The eighty-four national cemeteries are divided according to importance into twenty-six first-class, twenty second-class, sixteen third-class and twenty-two fourth-class. Those in the first class include Arlington, Andersonville, Antietam, Chalmette, Chattanooga, Nashville, Corinth, Gettysburg, Fredericksburg, Jefferson Barracks, Shiloh and Vicksburg.

In the number of interments, that at Arlington stands first, with about 22,000. That at Vicksburg is a rather close second, with 16,892. The Nashville cemetery is third, with 16,691.

Arlington, as is generally known, formerly belonged to the wife of Gen. Robert E. Lee. Mrs. Lee was a daughter of George Washington Parke Custis, who was a grandson of Martha Washington. The stately mansion whose classic columns have been seen by every visitor to Washington City, was inherited by her, and at the outbreak of the Civil war it was the Lee home. Lee, then a colonel in the United States army, wrote his resignation there, April 20, 1861. Two days later he quitted his beautiful home forever to accept command in the military forces of his state.

In 1864 the estate was sold for taxes by the "rump" Union government of Virginia, and was bought by the national government, which set it apart as a cemetery. After the war Lee considered making an attempt to regain the property, but finally decided that the time was not ripe.

Subsequently a son brought suit to recover on the ground that the estate had been illegally sold. After long litigation he established his claim, but reconveyed his rights to the United States for \$150,000.

Overlooking, as it does, the Potomac and the capital, a more beautiful spot could scarcely be imagined. Magnificent old oaks shade its glades and knolls, and art has perfected what nature left undone.

The cemetery contains the tombs

ing high, ponderous cubes and crosses of granite, beautified by the hand of the sculptor, and at their foot often you shall see the pathetic mound half buried beneath a mass of clinging ivy. There are flowers here always, brought by loving hands, and here and there about the silent field a drooping flag, its staff stuck in the turf, shows that some patriotic son or daughter remembers the deeds of valor.

And across the way-more elo-



LEE MANSION, ARLINGTON NATIONAL CEMETERY, ARLINGTON, VA.

of Logan, Sheridan, Lawton, and other noted generals, but the most famous monument is that to 2,111 unknown dead, gathered from the fields of Bull Run and the route to the Rappahannock. As the inscription states, "their remains could not be identified, but their names and deaths are recorded in the archives of their country, and its grateful citizens honor them as of their noble army of martyrs."

It it only when one stands before this monument and looks about at the thousands of little headstones gleaming white against the greensward that he realizes to the full the price that some men have paid for their country.

On one side of the cemetery as you enter through the upper gate is the officers' section; on the other the section for the privates. To the right, where the officers lie buried, the monuments are costly and pretentious. There are monoliths tower-

quently pathetic still—is the privates' section. For here lies an army of private soldiers. Only a little way the solemn stone cubes raise their heads above the velvet turf. As in life they formed according to military regulations, so do they now in death. The white stones, each bearing the name of the soldier who sleeps beneath, his rank, and the State from which he came, are set in orderly rows, uniform in distance each from the other, arrayed in order and marshaled like battalions.

About the cemetery there are tablets set in the grass on which are inscribed verses from Col. Theodore O'Hara's "The Bivouac of the Dead."

There is no other place where the thinking man may so enjoy the luxury of contemplation. In all the world it would be hard to find a more beautiful spot. Thick with gigantic forest trees and evergreen pines, set off with beautiful flowers, the land is rolling and uneven, so that each winding

turn brings one to new delights. It slopes up from the banks of the Potomac to where the old mansion of Robert E. Lee still stands, and from thence one can see, far off, the faintblue ridge of distant hills, the silver river there below with sluggish boats floating idly to the sea, the mystic shadows of the farther shore. Behind, amid the trees through which the odorous wind sighs now so gently, the lawns and meadow-ridges hang rich in flowers, though fortunately and wisely the landscape gardner has left nature alone as much as possible. Here and there the shrubbery is wild and tangled, though mostly the turf is cleaned and well-kept and trim, and art has aided nature, as in the beautiful Druidical amphitheater and rostrum, where, on Decoration Day, thousands gather beneath the green vines to hear spoken tributes to the dead.

One of the most interesting national cemeteries is that on Custer's battlefield in Montana. The story of how the dashing, yellow-haired young major-general and every man of five companies of the Seventh cavalry lost their lives in battle with the Sioux, June 25, 1876, is known to everyone. The 266 dead, including those who fell under Reno and Benteen, were buried where they fell, the bodies in most instances being found naked and shockingly mutilated. Subsequently the bodies were taken up and reburied in a hollow square to the east of the present monument. Near by are also buried the men who fell at the Fort Kearney massacre in 1866 and those killed by the Sioux at old Fort Smith a year or two later. Several soldiers who died in the Philippines and deceased veterans of the Civil war have likewise found a last resting place there, so that the interments in the cemetery now total upward of 1,200.

The smallest national cemetery is that at Ball's Bluff, Va. It is on the site of the battlefield of that name, fought in 1861. It is only fifty feet square, and is situated on a large bluff overlooking the upper Potomac. It contains the graves of one known and twenty-four unknown soldiers.

The only national cemetery outside the limits of the United States is that in the City of Mexico. It was established in 1851, three years after the close of the Mexican war, and contains the remains of 570 known and 750 unknown dead—men who lost their lives in carrying the Stars

(Continued on page XII)



We have frequently pointed out in these pages the possibilities of the work of educating the public on matters of modern cemetery design and management through the daily papers.

The story of the modern cemetery and its development from the old country grave-yard to the modern park plan burial ground is a vastly interesting one and one that makes strong appeal to the intelligent public when placed before them in forcible fashion.

Where newspapers have been interested in this work, and have been furnished with the proper facts on which to base their stories, they have placed the modern cemetery before the public in a way to inspire interest and enlist the support of the people for advanced ideas of modern cemetery development.

For example, no less a paper than the New York Sun took up the matter of exploiting the cemeteries, and put one of its best reporters on the job, and under the handsome, ornamental heading reproduced above, extending across an entire page, he produced nearly a page of interesting and fairly accurate information about the modern cemetery. He got his inspiration and suggestion from the file of PARK AND CEMETERY in the New York public library and most of the rest of his material from a morning's visit to Mr. Reese Carpenter of Kensico Cemetery.

Following are some interesting extracts from the story in the Sun:

There are few visitors to cities who do not include a cemetery in their list of places to see. This is an unconscious recognition of the work of the men who have fixed a high standard for cemetery designing and who have made burying places spots of beauty and attractiveness. A trip through a well ordered cemetery is a visit to an attractively laid out park.

Passing through an appropriate entrance the visitor follows winding roads that are flanked with clusters of blooming shrubs or beds of flowers. There is usually a lake with swans on it and edged by feathery willow trees, while about it knolls

rise up to afford variety to landscape. Here and there out of the frame of trees rises a stately monolith pointing skyward and marble tombs may be seen through the arches of the foliage.

Nothing suggests the morbid. It is an atmosphere of peace, of quiet beauty and of rest that prevails. Some striking statue, perhaps carved by a world famous sculptor, arrests the attention, while the simpler monuments that dot the long sweep of lawn form a pleasing contrast to the green carpet of the grass. One may follow miles of well kept roads with something of interest even to the casual visitor at every turn.

When towns in the United States were small the burying places naturally centered about the churches. In the hamlets of the South and elsewhere the country churchyard still exists and funeral processions that wind from the doors of the church to the grave may still be seen. In other regions these burying places are still seen, but rather as historical monuments than in actual use. In New York old Trinity and its churchyard are an example of this.

At one time such cemeteries as Trinity sufficed for the needs of a city. Then as New York grew there developed a demand for more provision for the dead. Greenwood Cemetery was the answer to the difficulty and then came Cypress Hills, both in Brooklyn.

These were at a distance from the city itself when New York's center was in lower Manhattan. The first spreading of the cemeteries did not carry with it any new conception. People bought lots and fenced them in with iron palings. Straight lines

and rows of monuments, just as in the churchyard, were still the custom. It may be that the park idea, generally followed now, had its origin when the cemetery officials found that it was very expensive to keep up a cemetery when each lot was separated from its neighbor by a fence.

It was not until the '80s that the lawn system found its first advocate in Supt. Strauch of Spring Grove Cemetery, Cincinnati. It has become a general plan now. Woodlawn Cemetery and on a still larger

lawn Cemetery and on a still larger scale Kensico are examples of it near New York.

The suburban railroad systems opened up the possibility of securing cemetery sites away from the town and safe from the encroachment of business. It was not so many years ago when it was an all day drive from the church to the cemetery. Now the funeral train is considered the proper thing and nobody regards is improper to have his dead conveyed to the place of entombment in a private car.

These things worked out slowly. There were men of business acumen and artistic sense who saw the trend of things and made arrangements to supply the coming demand for out-of-town cemeteries. They realized that the mortuary requirements of a growing city could no longer be met by the existing facilities and they laid their plans accordingly. They bought the most sightly and the best located tracts of land they could find and announced their intention of making them cemeteries.

It was not easy to finance the new cemeteries. To turn hundreds of acres of rolling land which was covered with stubborn second growth timber into a park and make it attractive was an enterprise that required a great outlay of money. The returns would be slow and men who had money for new enterprises were not always ready to undertake an investment which it would take years to get tangible returns on. Some men were far sighted enough to see results further away than a few months and financial backing was secured.

But what was to be done next? There were few precedents to go by. The trustees of these cemeteries usually engaged some landscape gardener to make plans, and he frequently didn't know how. An incident in the laying out of Kensico Cemetery illustrates this point.

The man who had been retained to do the landscape gardening had in mind a series of catacombs rising on the slope of the hill and a series of spokelike straight avenues radiating from the base. To make one of these it was necessary to cut through a knoll of ground. Reese Carpenter, who bought the land for the cemetery and was then, as he is now, its comptroller, objected.

It was decided to bring the matter up before a meeting of the board of trustees. The architect spoke first. He outlined his plans for a cemetery and gave precedents from famous burying grounds in Europe with wonderful tiers of catacombs. It was to be the wonder of the new world, a place which people would visit from every part of the globe. Then Mr. Carpenter was asked to give his opinions.

"It makes me weep to think of cutting through that knoll," he told the business men who formed the board. "I know that Jay Gould paid \$60,000 for a hill not half as fine as that, and now the landscape gardener's plans include the levelling of it. You are planning a cemetery not so much to be a place so unique that men will visit it as an eighth wonder of the world as to be a spot which men and women will select as the final abode of their loved ones.

"Let us suppose the case of a young woman of means whose home is in Westchester county, where she has lawns and sloping grounds about her residence. Her mother dies and is buried in our cemetery. Will this young woman prefer to stand near some marble catacomb and wave her hand at the passing trains and call out 'Here's where mother is buried,' or will she prefer to have her mother's grave in some quiet location on a brow of the hill, perhaps, where she can go quietly and meditate?

"Don't you think she would prefer to have her last home situated similarly to the one she occupied when she lived? My notion is that nature needs no improvement, all that we need to do is to smooth the rough places and make out roads, not in straight lines, but following the easiest line of ascent, just as the cowpaths now lead."

His argument prevailed, for it expressed the idea which lies at the bottom of modern cemtery planning. The site first, something as good as can be obtained and away from the noise of the city, and then merely nature assisted, not changed.

The artistic planner of a burying ground has a horror of laying out grounds. He objects to straight lines and rows of anything. They are never found in nature, and the man who can combine the charm of the wilderness with the conveniences of civilization is the one who will make a success of a cemetery, according to the advocates of the modern plan. It requires no little ingenuity and tact to bring about the results he is after, and particularly when he must please many people of varying opinions and artistic ideas, or lack of them.

The superintendents of the park and lawn cemeteries of today understand the psychology of their business. It is a long cry to the present day from the time when men put the skull and crossbones, symbols of dissolution and death, at the doors of their tombs. The entrance to the cemetery must be suggestive and give the visitor a proper impression at the first.

When the interior of the grounds is reached there are other even more important details to be considered. The roads must be shady and walking easy. If it is possible to have a stream and a body of water it helps a great deal toward securing the general tone desired in the place. In the rules and regulations of the best cemeteries it is usually stipulated that the designs of lot owners for their monuments must have the approval of the trustees. This is done to preserve the uniformity of monumental construction in the place.

Many cemetery lots are laid out along paths among flowers with only a suggestion of a marking, just enough to perpetuate the name of the deceased

The modest marble slab has been reduced to smaller compass and the bewildering rows of stones are avoided as much as may be.

The cemetery of the future will not be much different from the best of to-day, it is believed. The park and lawn plan has come to stay and in the future there will be merely a development of the ideas which now obtain

"There are too many mausoleums being built, I think," said Reese Carpenter, who has had a good many years of practical cemetery experience. "In the early days when a man buried his relative he went to the nearest stone fence and pulled out the best stone he could find and put it on the grave. Then the next fellow got a bigger one and perhaps scratched initials on it. The next step seems to have been to put the family history on the tombstone with as much poetry as there was room for.

"From an artistic point of view I would prefer to see fewer mausoleums, but more are being built than ever before. They are spoiling the appearance of a good many cemeteries and it is very sure that everybody can't be buried in them. I am having a bill introduced in the Legislature requiring interments to be made under the ground.

"It is the long stretches of lawn and fine views with small monuments which do not destroy the beauty of the grounds and shut out the view. I am still of the opinion that the cities of the dead should be made as attractive as time and money can make them and I think that the condition which an architect complains of when he says that 'cemeteries are monstrosities in their barrenness and sameness' is passing, at least in so far as the larger and newer burying places are concerned.

"The cemetery business is a ticklish business and an error of judgment may often mean the failure of the cemetery to attain its possibilities. Those who bring their dead to a cemetery must be treated with sympathy and consideration and they must be made to feel that their rights are protected and that as nearly as human foresight can do it they are assured that their resting places will receive perpetual care."

This descriptive and really informing article occupied the first page of an entire section devoted to the cemeteries, and including a number of large illustrated advertisements of cemeteries in the vicinity of greater New York.

This section inspired a similar effort in the Seattle Post Intelligencer, and perhaps other papers in other cities. The Seattle paper re-hashed the Sun's interesting story, and added some pictures and descriptive matter of local cemeteries, and allied industries to make a similar section.

Cemetery men elsewhere can enlist the aid of the people in modern methods of management in similar ways

CEMETERY NOTES

New Cemeteries

A Catholic cemetery with 250 lots has been contracted for in Carthage, Mo., and within a short time the work of preparing it will begin. It will be located in the northwest corner of the present Park cemetery, and will be known as St. John's cemetery, in the memory of the venerable Bishop John Hogan, retired.

After a lapse of more than a quarter of a century, Grover, Colo., one of the oldest towns in Weld county, has a cemetery. S. Cunningham, of the Rock Ridge district, has donated two acres of his ranch for that purpose. For years, Grover was a cattle station, and in the early days there were many shooting affrays in that section. It was the rule to bury victims of hair triggers or careless poker games where they fell.

The Oak Hill Cemetery Association, St. Louis county, filed articles of incorporation in St. Louis, Dec. 14. The cemetery is on the Big Bend road, near Denny road, in St. Louis county, and in the vicinity of Kirkwood and Webster Groves. The purpose of the association, the articles say, is to maintain a cemetery near those places. It is incorporated for \$50,000, fully paid.

Extensive tracts of land are being transferred in Springfield township, Delaware county, Pa., for the purpose of developing a large cemetery. The land lies between Springfield road and State road, overlooking Durby Creek. Residents of the vicinity are exercised over the probable effect the cemetery will have on their property values.

The Congregation B. B. Jacob, Savannah, Ga., has recently taken steps toward the purchase of a part of Bonaventure Cemetery of that city to be set aside as a burying ground for the members of the congregation. A committee with power to close the negotiations was appointed.

The City Fathers of Antigo, Wis., have set aside 20 acres of city property, just southeast of the city limits, for cemetery purposes, and have appropriated \$500 to begin improvement.

The Catholic Society of Torrington, Conn., through the new pastor of St. Francis Parish, Rev. Arthur O'Keefe, has purchased the Michael Beecher place, at the south end of the borough, for cemetery purposes. Cost, \$4,000, which covers 30 acres of land, with house and barn.

Additions and Improvements

Graceland Park Cemetery Association, Sioux City, Ia., has closed the purchase of 82 acres of land, adjoining the cemetery, for \$26,500. Graceland cemetery has now a total of 130 acres. The newly acquired property of the association will be improved in due time. The foundation for the \$30,000 marble chapel has been completed at the cemetery, and the material for the superstructure is due for delivery.

The trustees of Union cemetery, Columbus, O., have just purchased 2.67 acres of land adjoining the cemetery grounds on the north, paying for it the sum of \$6,875. The entire area of the old tract had been sold and the management was compelled to purchase more ground.

A number of minor improvements are planned for this year for Mt. Hope Cemetery, Champaign, Ill.

An addition of 40 acres of ground is under negotiation for Pleasant View cemetery, Kewanee, Ill. The price is \$12,000.

The erection of a mortuary chapel for Bennington Park Lawn cemetery, Bennington, Vt., is under consideration.

An important improvement now under way in the Chalmette National Cemetery, New Orleans, is a practically circular road for a turning point for automobiles.

From Cemetery Reports

At the annual meeting of the Lake View Cemetery Association, Kendallville, Ind., the reports of the secretary and superintendent were received and placed on file. Total receipts for the vear ending January 1, 1912, including balance from last, were \$8,496.79, which covered sales of lots \$816.15; interment fees, \$253; foundations, \$201.56. Disbursements amounted to \$7,140.47, which included labor, \$1,742.54; new water system \$2,177. The latter consisted of a 65 ft. steel tower, supporting a 10,000 gallon steel tank, the water being lifted by a power pump and gasoline engine. The water is distributed over the cemetery through about 5,000 feet of pipe. and there are 31 hydrants. Total interments to date 2,500. In the year 1906 an endowment fund was started with good results up to the present. H. A. Hanes, superintendent.

The Annual Meeting of Oakland Cemetery, St. Paul, Minn., was held November 3-7th last. During the year the Rest House, near the Cortland Street entrance was completed and opened for use, and the new green house justified its erection by the results of its first season's business. Both of these structures have been illustrated in these columns. The total receipts for the year were \$50,634.95, which included sales of lots, \$13,532; single graves, \$2,338; labor and foundations, \$3,550.95, and greenhouse sales \$7,775.85. The expenditures were \$50,427.51, of which the pay rolls consumed \$25,600.35. The assets of the association are now valued at \$317,978.51, of which the Perpetual Care funds invested amount to \$143,500. During the year 48 monuments were erected, and the average number of employes per month was 39. There were 467 interments made during the year making a total in the cemetery of \$18,718. The total value of plants grown and used from the greenhouse was \$8,898.25.

The report of superintendent F. H. Rutherford to the Board of Managers of Hamilton Cemetery, Hamilton, Ontario, is an interesting document. The year 1911 proved a most successful one financially and otherwise, and present conditions suggest the appropriateness of securing the enactment by the Ontario legislature of a Public Cemetery Act whereby some uniform laws may be enforced. During the year the acquisition of some 95 acres more land was secured. For years past the month of April has been devoted to the improving of a portion of the older cemetery, removing fences and bringing about a more modern appearance, and there yet remains some five or six more years of work to complete the transformation. Some general planting of trees and shrubs was carried out on both the old and newer portions of the cemetery last year, and it is suggested that such a scheme of planting be carried out yearly. Last summer a small section of roadway was treated with a solution of calcium chloride, which not only hardened the surface but also kept the roadway damp and prevented dust. Specially constructed map boxes were placed on certain sections which, with the telephone connections, have proved great labor saving devices. A comprehensive set of rules governing memorial services and military funerals are in course of establishment, and are already giving satisfaction to all concerned. The total available receipts in 1911 were \$17,148.51, which included \$4,164 for burials and removals, care of lots including income fund. Perpetual care fund, \$6,756.96; sale of lots, \$3,094.-40; single graves, \$323. The expenditures were \$17,121.10. The total amount of the perpetual care fund is \$79,763.89.

TOPICAL INDEX to OUTDOOR LITERATURE

An Index to articles on Gardening, Forestry, Park, Cemetery and Civic Improvement and kindred subjects in leading general and special magazines

Subscriptions will be received for any magazine or periodical at club rates with Park and Cemetery. Publications in which articles appear are listed below, and referred to by abbreviations, thus: S. L. 8 67 8, Feb. 03, means: Suburban Life, vol. 8, pages 67 8, February, 1909, Single copies should be ordered direct from the publications at oldresses given below.

PUBLICATIONS INDEXED AND ABBREVIATIONS USED.

American Botanist, Joilet, Iil. (A. B.), 75c year; 20c copy.
American City, The, (Am. C.), New
York, \$1.00 year. 15c copy; back numbers,

American Fiorist, Chicago (A. F.), \$1.00

American Fiorist, Chicago (A. F.), \$1.00 year; 5c copy.

American Homes and Gardens, New York (A. H. G.), \$3.00 year; 25c copy.

Architectural Record, New York (Arch. Rec.), \$3.00 year; 25c copy.

Art and Progress (A. & P.), Washington, D. C.; \$1.50 yr.; single copy 15c.

Beautiful Homes (B. H.), St. Louis, \$1.00 year; 10c copy.

Canadian Florist, The, Peterboro, Ont., Can. (C. F.), \$1.00 year; 10c copy.

Canadian Municipal Journal, Montreal (C. M. J.), \$1.00 year; 10c copy.

Conservation, Washington, D. C. (Cons.), \$1.00 year; 10c copy.

Country Life in America, New York City (C. L. A.), \$3.00 year; single copy, 25c.

City (C. L. A.), \$3.00 year; single copy, 25c.
Country Gentieman, Philadelphia, (C. G.), \$1.50 year; 20c copy.
Century Magazine, New York City (Cent.), \$3.00 year; 35c copy.
Chautauquan, The, Chautauqua, N. Y. (Chaut.), \$2.00 year; 25c copy.
Craftsman, The, New York City (Cr.), \$3.00 year; 25c copy.
Embaimers' Monthly, Chicago (E. M.), \$1.00 year; 10c copy.
Fern Builetin, Joliet, Ill. (F. B.), 75c year; 20c copy.
Florists' Exchange, New York City (F. E.), \$1.00; single copy, 5c.
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Florists' Review, Chicago (F. R.), \$1.00 year; 5c copy.
Forest Leaves, Philadeiphia, Pa. (For. L.), \$1.00 year; single copy, 10c.
Fruit Grower (F. G.), St. Joseph, Mo., \$1.00 a year; 10c copy.
Gardener's Chronicle of America, Jersey City, N. J. (G. C. A.), \$1.00 year; single copy. 10c.

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Civic Improvements, Home Grounds

Church, the Village, and how to Improve it, by Charles A. Green. Illust. Green's Fruit Grower, Rochester, N. Y., Jan. 1912.

Country School House and How to Improve it, by Charles A. Green, Illust. Green's Fruit Grower, Rochester, N. Y., Jan., 1912.

German City Worthy of Emulation, by William D. Foulke. Illust. Am. C. 6:412-419. Jan., 1912.

German City Planning Procedure. Basis of, by John Nolen L. A. 2:52-9. Jan., 1912.

Home Grounds and Gardens I Have Known, by Charles A. Green. Illust. Green's Fruit Grower, Rochester, N. Y., Jan., 1912.

Minneapolis Spirit, the Illust. Am. C. 6:398-404. Jan., 1912.

Gardens and Landscape Gardening.

Evergreens, Decorative Value of and How to plant them. Illust. Cr. 21: 364-71. Jan., 1912.

Evergreens for Indoors, by G. Teall. Illust. A. H. G. 9:23-4. Jan., 1912.

Concrete in Landscape Gardening by

Garden Magazine, Garden City, N. Y. (G. M.), \$1.00 year; single copy, 15c.

Gardening, Chicago (Gard.), \$2.90 year, single copy, 10c.

Gartenkunst, die, Frankfurt. Germany (German), G. K., \$4.00 year; 50c copy.

Good Roads Magazine, New York (G. R. M.), \$1.00 year; single copy. 10c. Horticulture, Boston (Hort.), \$1.00 year;

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Minnesota Horticulturist, Minneapolis (M. H.), \$1.00 year; single copy, 10c.

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year; 25c copy. Survey, New York (Sur.), \$2.00 year;

10c copy.
Woodland and Roadside, Boston (W. R.),
50c year; single copy, 10c.

M. M. Sloan. Illust., Arch. Rec. 31: 68-79. Jan., 1912.

Landscape Gardening Under Glass, by Thos. McAdam. Illust. C. L. A.

21:10-3. Dec. 15, 1911. Landscape Art and Country House Architecture, by Kurt Winkelhausen. (German) G. K. 14:21-2. Jan., 1912.

Landscape Architect and Architect, Co-Operation between, by Frederick Law Olmsted. L. A. 2:45-51. Jan., 1912.

Landscape Architecture, Course in at Columbia University, by Harold A. Caparn. L. A. 2:59-61. Jan., 1912.

Mexican House and Garden in California by E. E. Sayford. Illust. C. L. A. 21:37-9. Nov. 1, 1911.

November in the Garden. Illust. A. H. G. 8:416-7. Nov., 1911.

Soldier's Garden, by G. A. Avery. A. H. G. 8: sup. 10. Nov., 1911.

Topographical Map, Specification for, by Frederick Law Olmsted, L. A. 2:76-81. Jan., 1912.

Village Square, Laying out a. Illust. F. E. 33:30. Feb. 3, 1912.

Winter Garden, Home Made, by C. T. Whitehead. Illust. C. L. A. 21:16 Dec. 15, 1911.

Parks, Cemeteries and Public Grounds Bridges and Culverts, Highway. Illust. G. R. M. 3:11-16. Jan., 1912.

Competitive Designs for an Encircling Park at Tempelhof Field, Berlin. Illust. (German) G. K. 14:1-14. Jan.,

Greenhouse, a small, building, by P. S. Sweetser, Illust. A. H. G. 8:406-8. Nov., 1911.

Lawn Sprinkling, automatic System of, by Frank Shearer. Illust. L. A. 2:83-5. Jan., 1912.

Oiling Roads, Car for. Illust. Sci. Am. sup. 72:317. Nov. 11, 1911.

Playground Design, by Charles D. Lay Illust. L. A. 2:62-75. Jan. 1912.

Playground Tour, by the Spectator. Outlook 99:786-7. Nov. 25, 1911.

Road Making Lessons, Foreign, by A. W. Marks. Illust. Collier's. 48: sup. 56. Jan., 1912.

Turnpike, National, Building, by L. Shippey. Illust. Collier's 48: sup. 27. Jan. 6, 1912.

Zoological Gardens, Midnight Visit to Sci. Am. sup. 72:311. Nov. 11, 1912. Zoological Gardens, London, Future of, Science 34:835-6. Dec. 15, 1911.

Trees, Shrubs and Plants

Chestnut Blight, Additional Facts about, by I. C. Williams, Science 34:704-5. Nov. 24, 1911.

Chinese Trees and Shrubs, New, by Alfred Rehder. Illust. M. D. G. (German) 27:25-7. Jan. 20, 1912.

New Dahlias for 1912, by W. Knopf. Illust. M. D. G. (German) 26:614-16. Dec. 30, 1911.

Dahlias, Starting them Early, by E. S. Johnson. Illust. G. M. 15:20-2. Feb., 1912

Doctoring of Trees. Illust. Fruit Grower, St. Joseph, Mo., 23:24-5. Jan., 1912. Electricity and Plant Life. Illust. F. E. 33:222-3, Feb. 3, 1912.

Ferns, American, Notes on, by Wm. R. Maxon. F. B. 19:67-70. July, 1911.

Fernworts, Rare forms of, by Willard Clute. Illust. F. B. 19:72-4. July,

Flowering Shrubs, Selecting the Best, by J. Freyling. Illust. Magazine of Flowers, New York. 1:19-20.

Flowers Food for, by A. H. Huston. F. E. 33:31. Jan. 6, 1912.

Flowers, Kingdom of, trees and shrubs of China; by E. H. Wilson. Illust. National Geographical Magazine. 22: 1003-35. Nov., 1911.

Mathematics and Engineering in Nature. By A. Emch. Illust. Popular Science Monthly 79:450-8. November, 1911.

Moth, Controlling the. Illust. Fruit Grower, St. Joseph, Mo. 23:9-10. Jan., 1912.

Obesity in Trees. Harper's Weekly. 55:31. Dec. 16, 1911.





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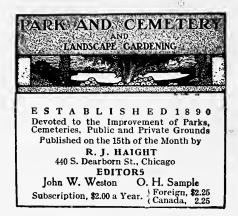
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Perennial Plants, Six, for Northern Gardens, by H. M. Speechly. Illust. M. H. 40:70-74. February, 1912.

Roses, Among the, in Europe, by Robert Pyle. F. R. 29:13-14. Jan. 18, 1912. Roses, Outdoor in the Northwest, by John W. Duncan. F. E. 33:31. Jan. 6, 1912.

Rose Society, American, Thirteenth Annual Meeting of. F. E. 33:69-70. Jan.

Shrubs and Bright Colored Twigs, by Wilhelm Miller. Illust. C. L. A. 21:29-30. Dec. 15, 1911.

Spraying Experience, by C. A. Umoselle, Fruit Grower, St. Joseph, Mo. 23:19. Jan., 1912.

Spraying vs. Fumigating, by M. C. Ebel. G. C. A. 14:70-1. Jan., 1912. Stonecrops, the Fun of Collecting, by Wilhelm Miller. Illust. G. M. 15:15-17. Feb., 1912.

Street Trees of Duesseldorf in the Summer of 1911, by B. Heinricy. Illust. G. K. (German) 14:24-6. Jan., 1912.

REPORTS, ETC., RECEIVED

From U. S. Department of Agriculture: Farmers' Bulletin No. 479, "Experiment Station Work"; Farmers Bulletin No. 468, "Forestry in Nature Study," by Edwin R. Jackson.

"American Parks and Their Construction," an interesting, well-written illustrated brochure explaining the principles of correct park construction, and the methods of work of the American Park Builders, Marquette Building, Chicago; prepared by the president of this organization, Myron H. West, former superintendent of the Lincoln Park System of Chicago.

THE COVER ILLUSTRATION

On the front cover of this issue, we illustrate a particularly imposing style of a modern cemetery entrance.

This gateway was erected in 1908, at the main entrance to the Forest Lawn Cemetery, Norfolk, Va. Its architecture is in keeping with the bold, graceful relief, produced by the landscape effect of this burial ground, over-looking the waters of Chesa-

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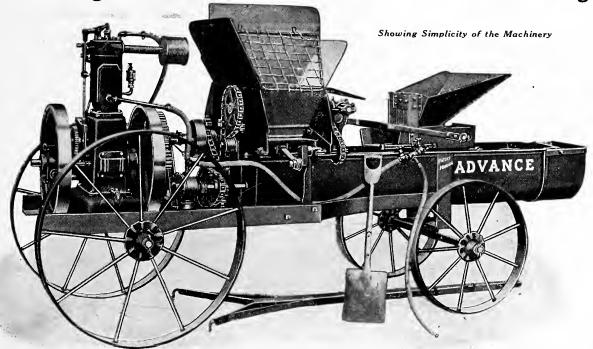
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From a stand-point of construction, one of the noticeable features is the hinges, which are very heavy, and so arranged to distribute the weight. The heavy "I" hinges have socket bearing hinge bars, which are braced to the posts on both sides. The pattern of these gates is particularly pleasing, owing to the filigree work. which harmonizes nicely with this particular style. The walk gates on either side of the large entrance gate arc of similar design and construction. each having an ornamental iron arch of the same material.

The Stewart Iron Works Company, of Cincinnati, Ohio, designed, built, and erected these gates for the owners, who, doubtless, like others have seen the wisdom of proper protection, which from a business stand-point, is about as important as the beatifying of the grounds.

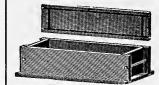
TRADE PUBLICATIONS

"Cowee's Gladioli," illustrated 1912 price list and guide to varieties, from Arthur Cowee, Berlin, N. Y.

"The Proper Care of Lawns," descriptive catalog explaining the use of the lawn rollers of the Dunham Co., Berea O

"Save Five Years," illustrated booklet describing quick results from planting large, well developed trees; from Wm. H. Moon Co., Morrisville, Pa.

The 1912 illustrated catalog of Ellwanger & Barry, Rochester, N. Y., is distinguished by a simple and systemate arrangement, combined with a complete index which makes the publication very convenient for reference. It is much more than a catalog and price list; it is a useful handbook and manual, containing valuable cultural directions and important hints indispensable to planters. In both the fruit and ornamental, as well as in the rose department, the



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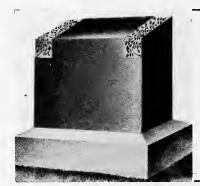


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Mount Hope Nurseries are setting a high standard.

Richland Nurseries, Rochester, N. Y.; catalog of Fruit Trees, Shrubs and Plants, spring 1912.

"Henderson's Garden Guide and Record;" accurate cultural directions for growing the leading flowers and vegetables from seed; pocket size, with blank pages for recording the history of the garden; Peter Henderson & Co., New York.

"Solvay Granulated Calcium Chloride;" illustrated description of the use of calcium chloride for dustless roads; many pictures of roads where chloride has been used; methods of application, prices, etc. From the Solvay Process Co., Syracuse, N. Y.

Calendar from Willadean Nurseries Sparta, Ky., bearing handsome reproduction of the famous painting, "In Perfect Tune," by Hugo Weiss.

Spring, 1912, nursery catalog of Storrs & Harrison Co., Painesville, O.

OBITUARY

In the January issue we made an announcement of the death of Mr. Davis Casselberry, superintendent of Odd Fellows Cemetery, Philadelphia, Pa., which we most sincerely take pleasure in correcting inasmuch as Mr. Davis is still amongst the living, and performing his regular duties at the above cemetery. We would like to assure our Philadelphia friends who have written to us on the subject that the information came to us from some source in that city which we have been unable up to this time to trace.

We regret to record the death of Mr. H. L. Dring, of Riverview Cemetery. Portland, Ore., one of the well known superintendents of the Pacific coast. Mr. Dring came to Riverview from Boston four years ago, and by his pleasing personality endeared himself to all having business relations with him. For the past two years he was employed in extensive improvements and additions, and the present first class condition of Riverview is largely due to his management.

PUBLISHER'S NOTES

Owing to the loss of their Limaville plant by fire Albright & Lightcap, manufacturers of terra cotta lot and grave markers. have consolidated all of their business at Ravena, O., where they have increased their facilities for supplying goods in their line.

PERSONAL

Richard Iwerson, Superintendent of Parks and of Union Cemetery, Calgary, Alberta, Canada; and consulting landscape artist of the Canadian Pacific Railway Co., has been making an exThe Finest Evergreen GROUND COVERS

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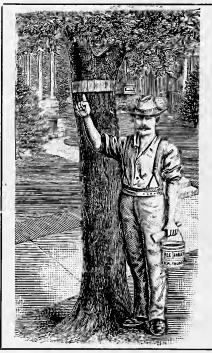
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tended tour of inspection of parks and cemeteries in the principal cities in Eastern Canada and in several of the United States. Mr. Iwerson's trip was taken at the suggestion of the Calgary Industrial and Department Society for the purpose of getting ideas in city planning and beautifying. The itinerary included Winnipeg, Minneapolis, St. Paul, La Crosse, Chicago, Milwaukee, Buffalo, Toronto, Ottawa and Montreal, where the parks and cemetery men and professional landscape architects whom Mr. Iwerson had time to visit accorded him a cordial welcome. Calgary is growing more rapidly than any city in the northwest, and its foremost citizens are imbued with the proper spirit to begin right in their plans for its development to meet its great future.

Ed. A. Kanst, for the past twenty-two years assistant landscape gardener of the South Park system Chicago tendered his resignation to take effect January 1, 1912. The South Park Commissioners presented Mr. Kanst with a handsomely engrossed copy of resolutions accepting the resignation and expressing their appreciation of his services. Mr. Kanst will engage in business on his own account.

James Burns, the successor of the late Gen. Noble Warwick, superintendent of the National Cemetery at Keokuk, Ia., has assumed his duties, having recently reached his new post from Grafton, W. Va., where he was in charge of the National Cemetery at that place.

George W. Olinger, a Denver, Colo., north side undertaker, and a member of the Park Board, suggests that a part of the money expended for small outlying parks should be spent on the establishment of a municipal cemetery, so improved that the very poor deserving people might have a beautiful last rest-

ing place. Mr. Olinger is quite sincere in this excellent proposition, being known to set aside a part of his income to provide free funerals for the deserving poor.

OUR NATIONAL CEMETERIES

(Concluded from page 785)

and Stripes to the halls of the Montezumas. It has an area of two acres and is the only cemetery established prior to the civil war.

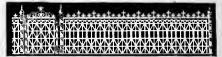
Of the 359,000 soldiers and sailors interred in the national cemeteries, the graves of 152,000 are marked "unknown." Over 9,000 of the total are the bodies of confederates, and who can say that they do not sleep peacefully beside their former foes?

Soldiers of the revolution, of the war of 1812, of the Mexican war, of the Civil war, of the war with Spain, and of many minor conflicts—all have found a final resting place in the national cemeteries. A special disinterring corps has been maintained by

the government for bringing home the remains of soldiers who died in Cuba and the Philippines. In 1908, for example, 147 bodies were brought home from the Philippines, of which number ninety-three were delivered to friends or relatives, while the rest were reinterred in national cemeteries.

Back Number Wanted

WANTED—One copy Park & Cemetery, April, 1911, to complete a file. W. H. M., Care Park & Cemetery, 440 So. Dearborn St., Chicago.



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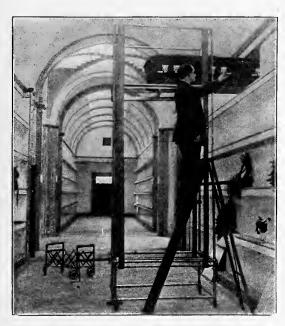
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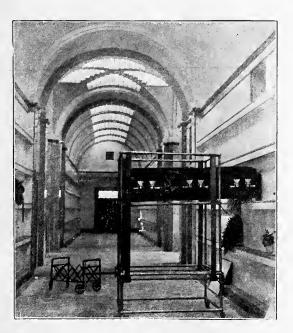
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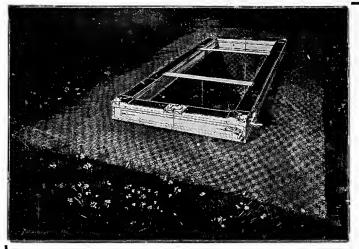
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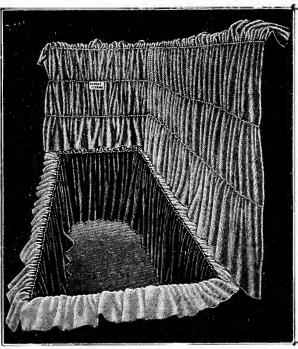
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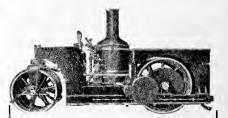
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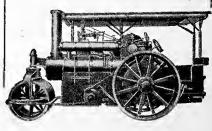
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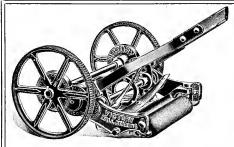


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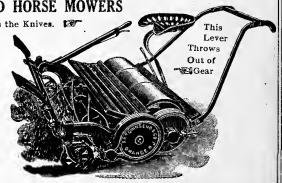
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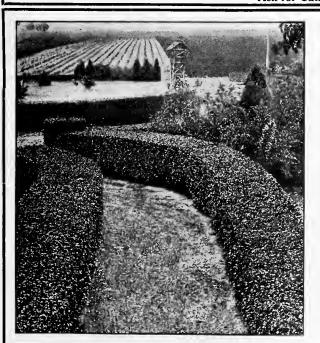
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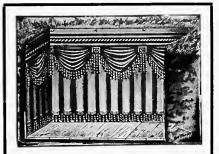
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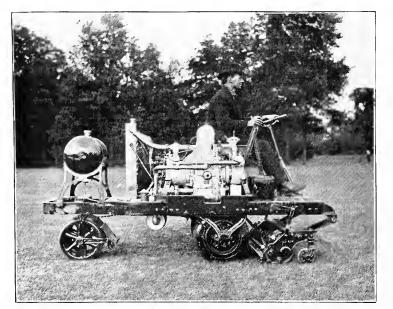
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